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Strategic Spillovers

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ARTICLES

STRATEGIC SPILLOVERS

*Daniel B. Kelly**

The conventional problem with externalities is well known: Parties often generate harm as an unintended byproduct of using their property. This Article examines situations in which parties may generate harm purposely, in order to extract payments in exchange for desisting. Such “strategic spillovers” have received relatively little attention, but the problem is a perennial one. From the “livery stable scam” in Chicago to “pollution entrepreneurs” in China, parties may engage in externality-generating activities they otherwise would not have undertaken, or increase the level of harm given that they are engaging in such activities, to profit through bargaining or subsidies. This Article investigates the costs of strategic spillovers, the circumstances in which threatening to engage in these spillovers may be credible, and potential solutions for eliminating, or at least mitigating, this form of opportunism through externalities.

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INTRODUCTION

Just over fifty years ago, Ronald Coase, writing in the *Journal of Law & Economics*, published *The Problem of Social Cost*.¹ Coase's article revolutionized legal scholarship,² profoundly influenced economic thinking,³

1. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & Econ. 1 (1960) [hereinafter Coase, *Social Cost*].

2. See Fred R. Shapiro, *The Most-Cited Law Review Articles Revisited*, 71 Chi.-Kent L. Rev. 751, 767 tbl.1 (1996) (ranking *The Problem of Social Cost* as most-cited law review article in Social Sciences Citation Index from 1956 through May 1995, with nearly double citations of nearest competitor).

3. In 1991 Coase received the Nobel Prize in Economics "for his discovery and clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy." The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1991, Nobelprize.org, <http://nobelprize.org/>

and was responsible, in no small part, for launching the field of law and economics.⁴ In his seminal article, Coase focused on social costs, that is, the harmful effects that individuals and firms may impose on others through the use and enjoyment of their property rights.⁵ Since then, scholars have written countless articles, essays, and books addressing these harmful effects, so-called “negative externalities,” and proposing a number of mechanisms for resolving externalities in a variety of contexts.⁶

nobel_prizes/economics/laureates/1991/ (on file with the *Columbia Law Review*) (last visited Oct. 19, 2011).

4. See Francesco Parisi, Coase Theorem and Transaction Cost Economics in the Law, *in* The Elgar Companion to Law and Economics 7, 14 (Jürgen G. Backhuas ed., 2d ed. 2005) (“Coase’s article, discussing widely cherished themes in the legal and economic traditions, constitutes, according to many commentators, the first example of an economic analysis of law in North American literature.”); Charles K. Rowley, An Intellectual History of Law and Economics: 1739–2003, *in* The Origins of Law and Economics: Essays by the Founding Fathers 3, 15 (Francesco Parisi & Charles K. Rowley eds., 2005) (noting Coase launched law and economics research program with this article).

5. See Coase, Social Cost, *supra* note 1, at 1–2 (“This paper is concerned with those actions of business firms which have harmful effects on others.”).

6. Economists define the term “externality” in various ways. Compare R.H. Coase, The Firm, the Market, and the Law 24 (1988) [hereinafter Coase, The Firm] (defining externality as “effect of one person’s decision on someone who is not a party to that decision”), with Harold Demsetz, Toward a Theory of Property Rights, 57 *Am. Econ. Rev. (Papers & Proc.)* 347, 348 (1967) [hereinafter Demsetz, Property Rights] (defining externality as effect that party does not have incentive to internalize). Pigou provided much of the seminal work on externalities in the first half of the twentieth century. See, e.g., A.C. Pigou, The Economics of Welfare 172–203 (4th ed. 1932) (describing situations in which “private net product” of incremental change in resource input differs from “social net product” and discussing means to mitigate this divergence); A.C. Pigou, Wealth and Welfare 148–71 (1912) (discussing divergence between private net product and social net product). According to Coase, though, the term itself “appears to have been coined by [Paul] Samuelson in the 1950s.” Coase, The Firm, *supra*, at 23. For a recent analysis and synthesis of the economic approach to external effects, see Steven Shavell, Foundations of Economic Analysis of Law 77–109 (2004) [hereinafter Shavell, Foundations]. For a historical overview of the concept of externality, see Andreas A. Papandreou, Externality and Institutions 13–68 (1994) (“There is one persistent problem reiterated throughout the history of the notion of externality, and that is the sense that no good characterization of externality exists.”). Richard Posner has noted the term “externality” is “useful, but potentially misleading” for two reasons: (1) “there is no presumption in economic theory” that one party rather than another is causing or “should be made to bear” the social costs of an activity; and (2) “if transaction costs are low the market may operate efficiently despite the apparent presence of externalities.” Richard A. Posner, Economic Analysis of Law 90 (8th ed. 2011) [hereinafter Posner, Economic Analysis]; see also Coase, Social Cost, *supra* note 1, at 2 (characterizing problem as being of “reciprocal nature”); Demsetz, Property Rights, *supra*, at 348 (“What converts a harmful or beneficial effect into an externality is that the cost of bringing the effect to bear on the decisions of one or more of the interacting persons is too high to make it worthwhile . . .”). This Article uses the terms “external effect,” “spillover,” and “externality” interchangeably and assumes that an activity that involves an external effect is an “externality” even if the nature of the effect depends upon the initial definition of property rights and even if the parties can bargain to resolve the effect.

The classic problem with negative externalities is thus well known. For example, in deciding whether to build a subdivision, a developer will consider his or her own costs but may disregard certain social costs such as increased congestion on nearby streets or additional runoff on adjacent parcels. Similarly, in deciding whether to operate a factory, a firm will calculate its own costs but may ignore certain harms to others like external health risks arising from elevated concentrations of particulate matter. The primary reason these harms are socially problematic is straightforward: A party may have an incentive to engage in an activity if the activity's private benefits exceed its private costs even though, as a result of the externality, the activity is undesirable as its social costs exceed its social benefits.

But activities that entail negative externalities can be problematic for another reason as well: Namely, individuals and firms may *purposely* seek to generate harm in their use of property to extract payments from victims in exchange for desisting. Indeed, an individual or firm may engage or threaten to engage in an activity that harms others even though the activity's private costs exceed the activity's private benefits. Or an individual or firm may continue imposing harm or increase the magnitude of harm it is imposing even though it otherwise might have an incentive to prevent the harm or reduce its magnitude. That is, despite the fact that, in the absence of the externality, a party may not have any reason to undertake an activity or to continue generating harm, the party might do so in an attempt to profit by imposing social costs on others. Thus, externalities, properly understood, are not only an unintended byproduct of otherwise self-serving activities; parties also can employ externalities opportunistically as a type of extortion, the problem of "strategic spillovers."⁷

7. As discussed below, see *infra* Part II.A.1, Coase himself acknowledges in *The Problem of Social Cost* that parties might threaten to impose harm on others to improve their bargaining positions. See Coase, *Social Cost*, *supra* note 1, at 7-8 (describing how cattle-raiser or farmer might act strategically to induce a larger payment in subsequent bargaining). In the wake of Coase, a handful of economists also pointed out that firms may have an incentive to generate externalities if they could exact bribes in exchange for refraining or desisting. See, e.g., E.J. Mishan, *The Postwar Literature on Externalities: An Interpretative Essay*, 9 *J. Econ. Literature* 1, 24 (1971) [hereinafter *Mishan, Postwar*] ("If institutional innovations over time cause transactions costs to decline . . . , there would be . . . a temptation for enterprising firms, and others in a position to do so, to produce unnecessary pollution in order to extract greater tribute from the public."); Jerome Rothenberg, *The Economics of Congestion and Pollution: An Integrated View*, 60 *Am. Econ. Rev.* 114, 115 (1970) ("[I]f external diseconomies against others can be expected to lead to bribes by victims to desist, then the production of negative externalities becomes a valid by-product of primary production."); Donald C. Shoup, *Comment, Theoretical Efficiency in Pollution Control*, 9 *W. Econ. J.* 310, 310-11 (1971) (noting "pollution entrepreneur" will have incentive to threaten to pollute if "expected value of bribes received for not polluting exceeds the cost of making the threats"). Two economists, George Daly and J. Fred Giertz, also criticized the "Coase-inspired" literature for failing to perceive that "if bargaining is possible there is no a priori reason for ignoring the existence and consequences of externally harmful activities which fail to yield direct private benefits but can yield profitable side payments." George Daly & J. Fred Giertz, *Externalities*,

Consider an example from the City of Chicago. In the nineteenth century, a series of disputes arose regarding the location of livery stables. These stables provided horse owners with a place to board their animals, but they also generated a number of unpleasant side effects—noise, light, congestion, and, of course, the smell of manure.⁸ Under Illinois state law, the determination of whether any particular stable constituted a nuisance was made only after the stable was operational.⁹ A proposal to build a stable could therefore jeopardize the property values, as well as the quiet enjoyment, of nearby residents.¹⁰ Recognizing an opportunity, a number of crafty Chicagoans “developed a regular practice of buying vacant lots in residential subdivisions, threatening to build a stable, and then extorting a steep price from the neighbors to be bought out.”¹¹ The practice was widespread and became known as the “livery stable scam.”¹²

This type of opportunism was limited neither to livery stables nor to the Windy City. With San Francisco’s rapid growth in the 1840s and 1850s, many land uses, including “[s]laughterhouses, chandlaries, soap and acid factories, charcoal burners, and other petty manufacturers whose trades had offensive side effects,” imposed significant social costs on city residents.¹³ Affluent residents sometimes offered to buy neighboring parcels to avoid these costs: “When J. Wieland proposed to put a brewery at the corner of Folsom and Second, in an aristocratic area, the ‘indignant’ residents ‘authorized fellow resident Milton S. Latham [a lawyer and politician] . . . to wait upon [Mr. Wieland] and make an offer of

Extortion, and Efficiency, 65 Am. Econ. Rev. 997, 998 (1975) [hereinafter Daly & Giertz, Externalities].

8. See Fred P. Bosselman, The Commodification of “Nature’s Metropolis”: The Historical Context of Illinois’ Unique Zoning Standards, 12 N. Ill. U. L. Rev. 527, 569 (1992) (“Livery stables produced certain externalities In addition to the accumulation of horse manure, the stables typically brought noise and lights late in the evening and early in the morning and created the nineteenth century equivalent of what we would call traffic and parking problems.” (citing *Oehler v. Levy*, 139 Ill. App. 294 (1907))). Livery employees, known as “hostlers,” also had a less than stellar reputation. See Clay McShane & Joel A. Tarr, *The Horse in the City: Living Machines in the Nineteenth Century* 119 (2007) (describing how “hostlers had a reputation for gambling and drinking” and “[s]tables were often the sites of illegal cockfights and of neighborhood fistfights”).

9. See Bosselman, *supra* note 8, at 569 (“Typically, Illinois courts said that a stable was not a nuisance *per se* so they would not enjoin its construction but would wait until the stable was built and in operation before determining whether it turned out to be a nuisance” (citing *Sheldon v. Weeks*, 51 Ill. App. 314, 315 (1893))).

10. See *id.* at 569–70 (“[T]he threat to build a livery stable in a residential neighborhood foreshadowed a substantial period of insecurity for the residents followed by no assurance of a satisfactory remedy.”).

11. *Id.* at 570.

12. *Id.* (citing Andrew L. King, *Law and Land Use in Chicago* 245–48 (1986)). The harmful effects arising from stables created conflicts in other cities as well. See, e.g., *Reinman v. City of Little Rock*, 237 U.S. 171, 174 (1915) (upholding municipal ordinance prohibiting livery stables in Little Rock and discussing odors and disease emanating from stables).

13. Roger W. Lotchin, *San Francisco, 1846–1856: From Hamlet to City* 11 (Illini Books 1997) (1974).

purchase for the property.’”¹⁴ And, as in Chicago, some of these transactions involved extortionate motives; according to one San Francisco newspaper, “a speculator had purchased a lot in a respectable section for the purpose of establishing a house of prostitution on it, knowing full well that the residents would buy him out at an inflated price.”¹⁵

These historical examples involving livery stables in Chicago and breweries and bordellos in San Francisco merely illustrate a more widespread problem that continues to this day. For example, the United Nations recently alleged that several Chinese factories are purposely generating excessive amounts of HFC-23, a potent greenhouse gas, to profit from carbon credits.¹⁶ Under the Kyoto Protocol, firms in industrialized nations are permitted to pay factories in China and other developing nations to reduce their emission of greenhouse gases such as HFC-23.¹⁷ The problem is that the value of the credits the factories can obtain by creating and then incinerating HFC-23, \$300,000 per ton, is considerably higher than the cost of manufacturing and destroying HFC-23, \$5,000 per ton. Thus, there is a perverse incentive for “pollution entrepreneurs,” including a number of factories in China, to manufacture goods in which HFC-23 is a byproduct and then extract a payment by selling carbon credits.¹⁸ In 2010, after reviewing “evidence that manufacturers of HFC-23 are gaming the system for profit by intentionally producing HFC-23 . . . at higher rates and quantities than necessary,” the United Nations halted the issuance of credits for five Chinese projects and launched “a comprehensive investigation to ensure the projects do not result in fake emissions offsets.”¹⁹ Generating excessive pollution to “cash in” on carbon

14. *Id.* at 12.

15. *Id.*

16. See Press Release, Envtl. Investigation Agency, UN CDM Acts to Halt Flow of Millions of Suspect HFC-23 Carbon Credits (Aug. 20, 2010) [hereinafter UN CDM], <http://www.prnewswire.com/news-releases/un-cdm-acts-to-halt-flow-of-millions-of-suspect-hfc-23-carbon-credits-101162889.html> (on file with the *Columbia Law Review*) (quoting Mark Roberts, of the Environmental Investigation Agency, as stating “The evidence is overwhelming that manufacturers [in China] are creating excess HFC-23 simply to destroy it and earn carbon credits”); see also Climate Change/ETS: Member States Agree to Boost Carbon Market Security, *Eur. Energy*, Feb. 9, 2011 (“Chinese manufacturers of refrigerant gases earned billions of dollars by agreeing to destroy the HFC-23 emitted by their production processes. According to some NGOs, certain firms are taking advantage of this windfall and producing HFC-23 solely to obtain credits . . .”).

17. See Brendan P. McGivern, Introductory Note, Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol, 37 *I.L.M.* 22, 26–27 (1998) (discussing Clean Development Mechanism aspect of Kyoto Protocol).

18. Shoup, *supra* note 7, at 310–11; see also John Heilprin, UN Carbon Trading Scheme: \$2.7 Billion Market Could Be ‘Biggest Environmental Scandal in History,’ *Huffington Post*, (Aug. 21, 2010, 12:30 AM), http://www.huffingtonpost.com/2010/08/23/un-carbon-trading-scheme_n_690958.html (on file with the *Columbia Law Review*) (discussing UN investigation into “perverse financial incentives” of Chinese chemical plants).

19. UN CDM, *supra* note 16.

credits exemplifies the problem of strategic spillovers in the twenty-first century.²⁰

This Article attempts to provide the first comprehensive analysis of “strategic spillovers” by exploring the structure of strategic spillovers, the ubiquity of strategic spillovers, the harm of strategic spillovers, potential solutions for strategic spillovers, and several variations of strategic spillovers.

Part I distinguishes between conventional externalities and strategic spillovers. For conventional externalities, an individual or firm is usually concerned only with the costs and benefits that it will itself internalize. Thus, under traditional assumptions, a negative externality is of *zero* value to the party generating the externality. By contrast, this Article contends that, in certain circumstances, a negative externality may have a *positive* value to an individual or firm, for the individual or firm might be able to extract a payment in exchange for ceasing its activity. Because of this positive value, a party may have an incentive to behave opportunistically and consider the externality in deciding whether or not to engage in the activity or continue the activity. After discussing the differences between self-interested and opportunistic behavior, the Article illustrates the distinction between conventional externalities and strategic spillovers with a numerical example involving pollution.

Part II suggests that strategic spillovers are ubiquitous by exploring examples in several areas of the law. In property law, strategic spillovers arise in situations involving nuisance, coming to the nuisance, spite fences and skyscrapers, and conservation easements and open spaces. In environmental law, this Article investigates “pollution entrepreneurs” and their emergence in the multi-billion dollar market for carbon credits. In intellectual property law, cybersquatters, the subject of federal legislation, and patent trolls and patent thickets, which can impede innovation and growth, are also types of strategic spillovers. In addition, this Article analyzes greenmail, as well as the strategic use of shareholder initiatives and cumulative voting, in corporate law; “milker bills,” legislative threats, and other forms of rent extraction in legislation and regulation; and negative expected value suits and objector blackmail in litigation and settlement.

Part III discusses the social costs of strategic spillovers. Parties often bargain to resolve externalities, so threatening to engage in strategic spillovers may reduce social welfare as parties incur *transaction costs* to prevent external harm without engaging in any productive activity. Moreover, opportunistic parties may unnecessarily invest *time and resources* engaging in externality-generating activities, or in the steps antecedent to such activities, if doing so is necessary to *establish the credibility of their threats*. In addition, even if it is infeasible to negotiate with potential vic-

20. See Steven Stoft, Carbonomics: How to Fix the Climate and Charge It to OPEC 212 (2008) (discussing rumors that certain Chinese chemical plants may have been constructed “mainly to cash in on carbon credits”).

tims *ex ante*, strategic parties may make *suboptimal decisions* if they anticipate that victims might be willing to bargain *ex post*. And potential victims, knowing parties may engage in strategic spillovers, may have an incentive to undertake various types of *wasteful precautions*.

Part IV investigates potential solutions for strategic spillovers. To prevent the social harm that strategic spillovers may entail, it is necessary to identify *opportunistic* behavior and devise mechanisms for deterring it.²¹ However, it is usually difficult to determine whether a party engaging in an activity is doing so *despite* the harm, or *because of* the harm, it is imposing on others. And, unfortunately, many of the traditional mechanisms for resolving conventional externalities are ineffective for deterring strategic spillovers.

Notably, attempting to resolve strategic spillovers through bargaining leads to perverse outcomes, even if bargaining is frictionless. Bargaining enables opportunistic parties to extract payments from potential victims, so bargaining may exacerbate, rather than ameliorate, the problem. Similarly, public subsidies—payments by the government to reduce expected social harm—may result in perverse outcomes as well. Such payments provide a financial incentive for parties to create harm, thereby encouraging opportunistic behavior. Regulatory prohibitions are also problematic. Prohibiting all possibly troublesome instances of an externality-generating activity may eliminate not only strategic spillovers but also certain socially desirable activities that entail nonopportunistic externalities.

If bargaining and subsidies allow too many externality-generating activities and prohibitions enable too few externality-generating activities, two alternatives are liability rules or corrective taxes. These alternatives would force opportunistic parties to pay victims (in the case of liability rules) or the government (in the case of corrective taxes) for the harm or expected harm of their externality-generating activities. If forced to internalize this harm, opportunistic parties would not have any incentive to extract payments, and self-interested parties would engage in externality-generating activities if and only if the activities are socially desirable. However, one problem with liability rules or corrective taxes is that these mechanisms involve litigation or administrative costs and, to separate strategic spillovers from other externalities, courts or agencies would have to impose liability or levy a tax on each party engaging in an externality-generating activity. As a result, relying on liability rules or corrective taxes has the potential to increase litigation or administrative costs significantly. Another problem is that liability rules and corrective taxes create informational problems for courts and agencies and, if a court or agency does not set liability equal to damages or a tax equal to expected harm,

21. This Article uses the terms “strategic” and “opportunistic” interchangeably. Below, the Article defines opportunism more precisely and distinguishes opportunism from mere self-interest. See *infra* Part I.B (noting conceptual ambiguities surrounding opportunism and discussing link between self-interest and strategic spillovers).

liability rules or corrective taxes might deter socially desirable activities or encourage additional types of opportunism.

Because the traditional mechanisms for resolving conventional externalities are imperfect, this Article also explores several alternative approaches for targeting strategic spillovers. These approaches include increasing financial disclosures, adjusting the alienability of entitlements, relying on equity to detect opportunism, and incorporating a doctrine of abuse of right.²² This Article also suggests the problem of strategic spillovers could be worse (and might be worse going forward), if not for several nonlegal limitations—transaction costs, reputation effects, and social norms—all of which may reduce the opportunity for opportunism. Thus, even if the legal system has largely ignored the possibility of strategic spillovers in the past, it may be necessary to differentiate between self-interest and opportunism and reduce the potential for strategic spillovers in the future.

Part V discusses how strategic spillovers may involve *positive*, as well as *negative*, externalities. The classic problem with positive externalities, like the classic problem with negative externalities, is well known: A party may not have an incentive to engage in an activity if the activity's private costs exceed its private benefits, even though the activity is desirable because its social benefits exceed its social costs. But positive externalities may create another problem as well: Certain parties may *purposely* withhold benefits they otherwise would generate in using their property to extract payments or subsidies in exchange for commencing their activities. And parties who opportunistically withhold external benefits may be just as prevalent as parties who opportunistically impose external costs. The existence of such strategic spillovers, whether positive or negative, suggests that certain externalities previously deemed "irrelevant" actually may be relevant.

The Article concludes with a summary of the main points.

I. THE STRUCTURE OF STRATEGIC SPILLOVERS

A. *Conventional Externalities Versus Strategic Spillovers*

For conventional externalities, self-interested individuals and profit-maximizing firms use their property for various purposes, and, in doing so, these individuals and firms may impose external effects on others. That is, a party may undertake an activity that has not only private benefits and costs, which directly affect the party engaging in the activity, but also social effects, which affect the welfare of other parties.²³ If these so-

22. Because strategic spillovers are often difficult to detect and involve harm that is purposely imposed, this Article also notes the possibility of utilizing supracompensatory remedies such as punitive damages or criminal sanctions to deter opportunism. See *infra* note 246.

23. See *supra* note 6 (surveying definitions of "externality" and competing conceptions of its usage).

cial effects are beneficial, the activity entails *positive externalities*; if these social effects are harmful, the activity entails *negative externalities*.²⁴

The primary focus of this Article is on negative externalities.²⁵ A textbook example is the “exhaust from automobiles [which] is a negative externality because it creates smog that other people have to breathe.”²⁶ Drivers of automobiles will focus on the private benefits and costs of driving but may ignore the harm that driving imposes on others who wish to breathe clean air. Another classic example is pollution from a factory.²⁷ In deciding whether to open a factory or increase production, a firm will compare its private benefits and costs but may ignore the social costs of pollution on local residents, other countries, or future generations.

A negative externality may be associated with an activity that is *socially undesirable*—the social costs of the activity outweigh its social benefits—or *socially desirable*—the social benefits of the activity outweigh its social costs.²⁸ For example, a factory that emits pollution as a byproduct of manufacturing cars may be engaging in an activity that, from a social perspec-

24. On externalities, both positive and negative, see generally J.J. Laffont, *Externalities*, in 3 *The New Palgrave Dictionary of Economics* 192, 192 (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008) (describing traditional theory of externalities).

25. For a discussion of positive externalities and the opportunistic withholding of social benefits, see *infra* Part V.

26. N. Gregory Mankiw, *Essentials of Economics* 204 (5th ed. 2008).

27. See William J. Baumol & Wallace E. Oates, *Economics, Environmental Policy, and the Quality of Life* 75–79 (1979); see also Daniel C. Esty, *Toward Optimal Environmental Governance*, 74 N.Y.U. L. Rev. 1495, 1497 n.5 (1999) (describing “environmental pollution as an uninternalized externality”).

28. The criterion this Article employs for evaluating an activity, a public policy, or a legal rule is based on social welfare. This Article, therefore, adopts many of the standard assumptions of welfare economics, in which “social welfare is assumed to be a function of individuals’ well-being, that is, of their utilities.” Shavell, *Foundations*, *supra* note 6, at 2. An activity that deviates from the socially optimal outcome involves a “deadweight loss,” to which this Article will refer occasionally as a “social loss,” “social waste,” or “misallocation of resources.” A reduction in deadweight losses may be possible if parties incur transaction costs, construed either as the costs of bargaining or, more broadly, as the costs of establishing and enforcing property rights, see Douglas W. Allen, *Transaction Costs*, in 1 *Encyclopedia of Law and Economics* 893, 893–926 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000) (discussing two meanings of transaction costs), but incurring transaction costs reduces social welfare as well. The social objective is thus to minimize the sum of transaction costs and deadweight losses. Cf. Robert C. Ellickson, *Property in Land*, 102 Yale L.J. 1315, 1326 (1993) (“Different land regimes . . . involve different combinations of transaction costs and deadweight losses. A change in land rules is *efficient* when it reduces the sum of these two sorts of costs.”). As discussed below, strategic spillovers can increase transaction costs or deadweight losses or both and, as a result, may prevent parties from achieving the socially optimal outcome. See *infra* Part III (describing mechanisms by which strategic spillovers create suboptimal outcomes, including transaction costs, informational signaling costs, and precaution costs). However, strategic spillovers are also troublesome from a fairness or rights-based perspective. If it is problematic to grant a firm the “right” to pollute when the firm is generating pollution as an incidental byproduct of producing food, cars, or other “goods,” then it seems even more objectionable to permit a firm to pollute when it is purposely producing pollution to harm others in order to extract a payment.

tive, is either undesirable or desirable. Operating the factory may be *socially undesirable*, even if the firm has a private incentive to operate the factory, if the social costs of operating the factory, including the external costs of the pollution, exceed the social benefits of manufacturing the cars. By contrast, operating the factory may be *socially desirable*, despite the external costs of the pollution, if the social benefits of manufacturing the cars exceed the social costs of operating the factory, including the external costs of the pollution.²⁹

The conventional view of externalities, whether associated with socially undesirable or desirable activities, is that externalities arise as the *unintended byproduct* of otherwise self-serving activities.³⁰ Under this view, in deciding whether to undertake an externality-generating activity, the party creating the externality may have no reason, at least in the absence of legal liability or some other mechanism that forces the party to “internalize” the externality, to consider the harm it is imposing on others.³¹ Because a party is only concerned with the costs and benefits it will itself internalize, a negative externality, it has been assumed, does not have any value to the party generating the externality and, therefore, does not have any effect on the party’s decisionmaking process.³²

29. Cf. Henry N. Butler & Jonathan R. Macey, Externalities and the Matching Principle: The Case for Reallocating Environmental Authority, 14 Yale L. & Pol’y Rev. 23, 29 (1996) (“[T]he economics of pollution control demonstrate that it would be undesirable to prevent all externalities because many externalities are the result of socially desirable economic activity.” (citing James M. Buchanan & Craig Stubblebine, Externality, 29 *Economica* 371 (1962))).

30. See, e.g., E.J. Mishan & Euston Quah, *Cost-Benefit Analysis* 99 (5th ed. 2007) (defining external effect as “a direct effect on another’s profit or welfare arising as an *incidental by-product* of some other person’s or firm’s legitimate activity” (emphasis added)); Louis Kaplow & Steven Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 109 Harv. L. Rev. 713, 716 n.2 (1996) [hereinafter Kaplow & Shavell, Property Rules] (“By harmful externalities, we mean adverse outcomes that occur as a *byproduct* of an injurer’s activity” (emphasis added)); Robert N. Stavins, Environmental Economics, in 2 *The New Palgrave Dictionary of Economics*, supra note 24, at 882 (defining externality as “an *unintended* consequence of market decisions which affect individuals other than the decision maker” (emphasis added)).

31. The usual assumption is that, in the absence of liability, regulation, taxation, or some other mechanism that causes a party to internalize a negative externality, external costs will not affect a party’s incentive to engage in the action. See, e.g., Robert S. Pindyck & Daniel L. Rubinfeld, *Microeconomics* 645 (7th ed. 2009) (noting party “has no incentive to account for the external costs that it imposes” on others). Similarly, the usual assumption is that, in the absence of a subsidy or other mechanism that allows a party to internalize a positive externality, external benefits will not affect a party’s incentive to engage in the action. See, e.g., Brett M. Frischmann & Mark A. Lemley, Spillovers, 107 Colum. L. Rev. 257, 259 & n.2 (2007) (“[T]he only motive that an individual has to provide units of such a good is his or her own private motive of present or future consumption. Enjoyment of those units by others is an incidental by-product.” (quoting Richard Cornes & Todd Sandler, *The Theory of Externalities, Public Goods, and Club Goods* 55 (1996))).

32. See Posner, *Economic Analysis*, supra note 6, at 90 (explaining concept of negative externality and concluding that, “unless forced by law to do so or unless it is the

By contrast, for strategic spillovers, a self-interested individual or profit-maximizing firm may *purposefully* seek to generate harm in the use of property to extract payments or other benefits from victims in exchange for desisting. In these circumstances, the negative externality may have a positive value for the individual or firm engaging in the activity. Thus, in deciding whether to undertake an externality-generating activity, whether to continue an activity that is imposing external harm, or whether to increase, rather than prevent or reduce, external costs from an existing activity, an individual or firm may have an incentive to consider not only the costs and benefits it will itself internalize but also the positive value of the negative externality. Such a party may engage in a strategic spillover if the expected benefits of doing so, including any benefits derived from payments by victims or subsidies from the government, exceed the costs of engaging or threatening to engage in the externality-generating activity.³³

Although certain parties may have a private incentive to engage in strategic spillovers, strategic spillovers are socially undesirable. The social costs of such spillovers are discussed in more detail below,³⁴ but the basic intuition is that strategic spillovers are problematic because they involve a party engaging or threatening to engage in an activity that, but for the possibility of extracting a payment from victims, the party would not have undertaken. Put another way, strategic spillovers involve activities that not only entail harmful external effects but also are contrary to the party's self-interest in the absence of the external harm.³⁵

owner," a party "will not take into account [potential harm] in making its decisions" because "the cost is external to its decisionmaking process"); Buchanan & Stubblebine, *supra* note 29, at 372-77 (modeling concept of externality formally but implicitly assuming that effect of A's activity on B will not alter A's utility function); see also Note, *Discovery Abuse Under the Federal Rules: Causes and Cures*, 92 Yale L.J. 352, 352 n.5 (1982) ("An externality is a cost or benefit resulting from a decisionmaker's activity that does not accrue to the decisionmaker and is thus 'external' to his decisionmaking process." (citing Jack Hirshleifer, *Price Theory and Applications* 532 (2d ed. 1980))).

33. See Shoup, *supra* note 7, at 310-11 (pointing out that firm may threaten to pollute if payments received for not polluting exceed costs of making threats).

34. See *infra* Part III (discussing harmful effects of strategic spillovers).

35. Obviously, a party that is engaging in a strategic spillover is acting out of self-interest in seeking to extract a payment from others. Cf. Oliver E. Williamson, *Opportunistic Behaviour in Contracts*, in 2 *The New Palgrave Dictionary of Economics and the Law* 703, 703 (Peter Newman ed., 1998) [hereinafter Williamson, *Opportunistic Behaviour*] ("Opportunism is a type of self-interest seeking . . ."). However, such an action is contrary to the party's self-interest in the absence of the external harm because, if the party did not have the opportunity to impose such harm and extract a payment, the party would not have any incentive to undertake the action. Thus, even counting the opportunistic party's private benefits (including any payments the opportunistic party is able to extract) in the social calculus, strategic spillovers produce no net social benefits. Of course, if we discount or exclude the opportunistic party's private benefits, then strategic spillovers are, from a social perspective, even more problematic. Cf. George M. Cohen, *The Negligence-Opportunism Tradeoff in Contract Law*, 20 Hofstra L. Rev. 941, 973 (1992) ("Opportunistic behavior produces no social benefits; instead of adding to the net

In addition, strategic spillovers are problematic whether the opportunistic party engages in the externality-generating activity or merely threatens to do so. If the opportunistic party engages in the activity,³⁶ the loss in social welfare includes both the external harm imposed on others and the private loss to the individual or firm (by definition, private costs exceed private benefits), as well as any transaction costs in bargaining to extract payments. If the opportunistic party does not engage in the activity (suppose the party agrees not to engage in the activity in exchange for a payment), threatening to engage in the activity and then attempting to extract a payment is itself socially undesirable. Here, the social loss includes the transaction costs of bargaining to extract payments, any investments the opportunistic party undertakes to establish the credibility of the threat, and any precautions that potential victims undertake to avoid strategic spillovers.³⁷ Thus, irrespective of whether or not the opportunistic party engages in the externality, strategic spillovers are socially undesirable.

B. *Self-Interest Versus Opportunism*

Thus far, the Article has identified three situations involving external effects: (1) conventional externalities associated with socially undesirable activities; (2) conventional externalities associated with socially desirable activities; and (3) strategic spillovers, which are socially undesirable regardless of whether the opportunistic party undertakes or threatens to undertake the activity. The external harm that arises in the first two categories is the unintended byproduct of individuals and firms using their property for what are otherwise self-serving activities. By contrast, the external harm that arises in the third category, strategic spillovers, is often imposed purposely, with the objective of extracting a payment in exchange for desisting. But how are we to distinguish between behavior that is “self-interested” and behavior that is “opportunistic”? And what additional problems do strategic spillovers create for the resolution of externalities?

As jurists and economists have recognized, “opportunistic” behavior is notoriously difficult to define.³⁸ Oliver Williamson famously defined

wealth of society it merely redistributes wealth from one party to another. Because opportunistic behavior, like criminal activity, violates social norms, any private gains to the opportunistic party must be excluded from the social calculus.” (footnotes omitted)).

36. There are a number of reasons a strategic party may undertake, rather than merely threaten to undertake, an externality-generating activity: Initiating the activity may be necessary to establish the credibility of the threat, see *infra* Part III.B; bargaining may fail and the strategic party may initiate the activity to bolster the credibility of future threats, see *infra* Part III.B; or bargaining may be infeasible *ex ante* but not *ex post*, and the party may initiate the activity to extract a payment in exchange for desisting, see *infra* Part III.C.

37. See *infra* Parts III.A–D (discussing harms attributable to strategic spillovers).

38. See, e.g., G. Richard Shell, *Opportunism and Trust in the Negotiation of Commercial Contracts: Toward a New Cause of Action*, 44 *Vand. L. Rev.* 221, 228 (1991)

opportunism as “self-interest seeking with guile.”³⁹ Within this definition, Williamson includes “calculated efforts to mislead, deceive, obfuscate, and otherwise confuse,” including the incomplete disclosure of information.⁴⁰ More recently, Henry Smith has suggested that “opportunism is behavior that is undesirable but that cannot be cost-effectively captured—defined, detected, and deterred—by explicit ex ante rulemaking.”⁴¹ Under this view, opportunistic behavior is “technically legal but is done with a view to securing unintended benefits from the system, and these benefits are usually smaller than the costs they impose on others.”⁴²

The idea underlying strategic spillovers is consistent with both of these definitions. A party engaging in a strategic spillover seeks to maximize its own self-interest but does so in a way that involves “guile.”⁴³ The strategic party may attempt to exploit an informational advantage over potential victims; indeed, those bearing the harm of a strategic spillover most likely would be unwilling to pay to prevent the spillover if they had perfect information about the strategic party’s private costs and benefits. By undertaking or threatening to undertake an activity that is contrary to its self-interest, the strategic party is thus engaging in “calculated efforts

(“The term ‘opportunism’ is not defined precisely in either the legal or economic literature.”). Some commentators have argued that the distinction between self-interested and opportunistic behavior is meaningless. See, e.g., Peter Klein, Does Transaction Cost Economics Need Opportunism?, *Organizations and Markets* (Oct. 6, 2006), <http://organizationsandmarkets.com/2006/10/06/does-transaction-cost-economics-need-opportunism/> (on file with the *Columbia Law Review*) (“Today, . . . the distinction between opportunism and self-interest probably confuses more than it clarifies.”). However, a number of legal scholars have emphasized recently why distinguishing opportunism from self-interest is significant. See, e.g., Lee Anne Fennell, Adjusting Alienability, 122 *Harv. L. Rev.* 1403, 1454 (2009) [hereinafter Fennell, Adjusting Alienability] (discussing why “we may want to make the entitlement to engage in a behavior depend on one’s reason for wishing to engage in it”); Henry E. Smith, An Economic Analysis of Law Versus Equity 9–16 (Oct. 22, 2010) (unpublished manuscript) [hereinafter Smith, Law Versus Equity], available at http://www.law.yale.edu/documents/pdf/LEO/HSmith_LawVersusEquity7.pdf (on file with the *Columbia Law Review*) (noting criticisms of concept of opportunism in economics “have a great deal of force” but describing many situations in which “the deliberate (bad faith) wrongdoer is treated more harshly than the innocent one” and explaining functional significance of this distinction); see also Oliver E. Williamson, Opportunism and its Critics, 14 *Managerial & Decision Econ.* 97, 97–100 (1993) (defending significance of opportunism).

39. Oliver E. Williamson, *The Economic Institutions of Capitalism* 47 (1985) [hereinafter Williamson, *Economic Institutions of Capitalism*].

40. *Id.*; cf. Williamson, *Opportunistic Behaviour*, *supra* note 35, at 703 (“Opportunism contemplates self-interest seeking with guile—to include the incomplete or distorted disclosure of information, especially calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse.”).

41. Smith, *Law Versus Equity*, *supra* note 38, at 9.

42. *Id.* at 10.

43. Williamson, *Economic Institutions of Capitalism*, *supra* note 39, at 47.

to mislead, deceive, obfuscate, and otherwise confuse.”⁴⁴ In addition, strategic spillovers involve behavior that is “technically legal,” even though such behavior might not be permissible if legislatures, agencies, and other institutions could cost-effectively target it through *ex ante* rulemaking.⁴⁵

Identifying opportunism also complicates the resolution of externalities. The principal problem addressed in the existing literature is distinguishing between conventional externalities arising as the unintended byproduct of *socially undesirable* activities and conventional externalities arising as the unintended byproduct of *socially desirable* activities. Thus, prior scholars have focused, understandably, on various mechanisms—including bargaining, regulation, liability, taxation, and subsidies—for resolving such externalities.⁴⁶ Almost invariably, the goal of these mechanisms is to force parties to “internalize” their external costs, with the ultimate objective being to separate socially desirable from socially undesirable activities.⁴⁷

The problem this Article analyzes, by contrast, is the difficulty of distinguishing between *conventional externalities* that arise as the unintended byproduct of *socially desirable* activities and *strategic spillovers*, which are generated purposely to extract a payment and are *socially undesirable*. Identifying strategic spillovers may be possible, especially in situations in which potential victims can acquire information regarding a party’s motivation. However, strategic spillovers are sometimes difficult to detect because an opportunistic party may be engaging in behavior that is identical to, albeit with a different motivation than, a self-interested party who is undertaking an activity that is in fact socially desirable.⁴⁸ Below, this Article illustrates the difficulty of identifying opportunism, and the dis-

44. Williamson, *Opportunistic Behaviour*, *supra* note 35, at 703.

45. Smith, *Law Versus Equity*, *supra* note 38, at 10.

46. See generally Shavell, *Foundations*, *supra* note 6, at 83–109.

47. The idea of forcing parties to “internalize the externalities” of their activities is discussed in several of the seminal articles on property and externalities. See, e.g., Demsetz, *Property Rights*, *supra* note 6, at 348 (“A primary function of property rights is that of guiding incentives to achieve a greater internalization of externalities.”); Robert C. Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls*, 40 U. Chi. L. Rev. 681, 684 (1973) [hereinafter Ellickson, *Land Use Controls*] (“Welfare economists have urged that harmful externalities be ‘internalized’ to eliminate excessive amounts of nuisance activity. Internalization is said to be accomplished through devices that force a nuisance-maker to bear the true costs of his activity.”); see also Jedediah Purdy, *The Politics of Nature: Climate Change, Environmental Law, and Democracy*, 119 Yale L.J. 1122, 1132 (2010) (“The standard solution to negative externalities . . . is to change the incentives of individual choices by legally internalizing some of the costs of the harms.”).

48. Cf. James Lindgren, *Unraveling the Paradox of Blackmail*, 84 Colum. L. Rev. 670, 701–02 (1984) (describing “main problem” as “distinguishing blackmail from legitimate bargaining” or “why the same threat when made by one person can be permissible, but when made by another person in different circumstances can be blackmail”).

inction between conventional externalities and strategic spillovers, with an example involving pollution.⁴⁹

C. *A Numerical Example Illustrating Strategic Spillovers*

To illustrate the concept of strategic spillovers, consider a hypothetical example involving the “j-Phone5,” a new mobile phone and internet device. An entrepreneur expects, if she opens a factory to build the j-Phone5, to receive private benefits and incur private costs in manufacturing this new product. Moreover, there will necessarily be, even under the best available technology, external harm to the factory’s neighbors. Thus, the social welfare function is the private benefit to the entrepreneur minus both the private cost to the entrepreneur and the external harm on neighbors.⁵⁰ Table 1 illustrates three situations in which manufacturing the j-Phone5 involves external harm on neighbors.

49. One concern with attempting to define, and to deter, strategic spillovers is that in doing so the legal system may unnecessarily target certain activities that are primarily undertaken to obtain a payment but that are generally considered to be legitimate. For example, an investor in securities purchases a particular stock, hoping the price will rise in order to obtain a payment, even though there may be negative effects on third parties. Similarly, a speculator in real estate or oil futures may have no intention of residing on the property or utilizing the oil, but nevertheless engages in speculation to obtain a payment. The concern is noteworthy but unlikely to be critical. Strategic spillovers involve a legal and economic problem that is distinct from these situations because of the difference between *pecuniary* and *nonpecuniary* externalities. See generally Laffont, *supra* note 24, at 192. Pecuniary externalities entail external effects on third parties through prices (e.g., relative prices or asset prices) rather than actual resource effects. See *id.* (defining pecuniary externalities as those “which work through the price system”). By contrast, nonpecuniary (i.e., “real” or “technological”) externalities involve harm that has a direct resource effect on a third party (e.g., a factory’s pollution on neighbors). See *id.* (defining technological externalities as those which do “not work through the price system” and listing pollution as an example). In traditional cost-benefit analysis, pecuniary externalities are not taken into account. See Randall G. Holcombe & Russell S. Sobel, *Public Policy Toward Pecuniary Externalities*, 29 *Pub. Fin. Rev.* 304, 304 (2001) (“Pecuniary externalities have been analyzed relatively little by economists, perhaps because the costs or benefits they create do not result in resource misallocations.”). The focus of this Article, like Coase’s focus in *The Problem of Social Cost*, is on activities involving nonpecuniary, rather than pecuniary, externalities. Cf. Clifford G. Holderness, *The Assignment of Rights, Entry Effects, and the Allocation of Resources*, 18 *J. Legal Stud.* 181, 184 n.9 (1989) (“Consistent with the title of his article, ‘The Problem of Social Cost,’ Coase limits all of his examples and, presumably, his analysis, to physical interferences between individuals.”). Thus, this Article does not consider situations involving externalities from market competition, speculative investing, or other changes in asset prices.

50. Assume for the sake of simplicity that there are no positive externalities (i.e., external benefits) for the neighbors and that there is asymmetric information (i.e., that none of the neighbors know the entrepreneur’s private benefits and costs).

TABLE 1:
THREE SITUATIONS INVOLVING EXTERNAL EFFECTS
(Social Welfare = Private Benefit – Private Cost – External Harm)

	Situation # 1 Externality Undesirable Activity	Situation # 2 Externality Desirable Activity	Situation # 3 Strategic Spillover Undesirable Activity
Private Benefit to Factory Owner	50	50	30
Private Cost to Factory Owner	35	25	35
External Harm to Neighbors	20	20	20
Social Welfare	-5	+5	-25

In Column 1, the entrepreneur has an incentive to operate the factory because her private benefit, 50, is greater than her private cost, 35, even though operating the factory results in a decrease in social welfare, $50 - 35 - 20 = -5$. This column represents the conventional problem with externalities: A party might have a private incentive to engage in an activity even though, as a result of the harm arising as the incidental by-product of its activity, 20, the activity itself is socially undesirable.⁵¹

In Column 2, as in Column 1, the entrepreneur has an incentive to operate the factory because her private benefit, 50, is greater than her private cost, 25. However, unlike in Column 1, operating the factory is socially desirable because doing so results in an increase in social welfare, $50 - 25 - 20 = +5$. This column represents the situation in which, even though there are negative external effects, 20, the activity is socially desirable because the social benefits exceed social costs.⁵²

For Columns 1 and 2, even if the legal system initially assigns the entitlement to the “wrong” party (i.e., to the factory owner in Column 1 or to the neighbors in Column 2), the parties could transfer the entitlement and resolve the problem of social costs through bargaining, as

51. See, e.g., Shavell, *Foundations*, supra note 6, at 80 (pointing out, in discussing socially optimal resolution of external effects, that “it will be socially desirable for individuals to engage less often in acts that cause detrimental effects than is in their immediate self-interest”).

52. See, e.g., Buchanan & Stubblebine, supra note 32, at 381 (“[T]he observation of external effects, taken alone, cannot provide a basis for judgment concerning the desirability of some modification in an existing state of affairs. . . . The internal benefits from carrying out the activity, net of costs, may be greater than the external damage that is imposed on other parties.”).

Coase emphasized.⁵³ For either column, a range of possible values exists such that both the entrepreneur and the neighbors would be better off by bargaining to resolve the external effects.⁵⁴ Thus, assuming bargaining costs are zero, bargaining is effective for resolving the externality and achieving the optimal result, even if the initial assignment of entitlements is erroneous.

Now consider Column 3, which illustrates the concept of a strategic spillover. Legal scholars and economists typically have assumed that this kind of situation does not present a problem; seemingly, the entrepreneur would have an incentive *not* to operate the factory as the entrepreneur's private costs, 35, exceed her private benefits, 30.⁵⁵ Under the conventional wisdom, the entrepreneur's private incentive not to operate the factory is consistent with the optimal social outcome because operating the factory would be socially undesirable as the social costs, 55, exceed the social benefits, 30. The conventional wisdom, however, ignores the possibility that the entrepreneur may have an incentive to engage (or threaten to engage) in production if the entrepreneur is able to impose external harm, 20, and then extract a payment from the neighbors in exchange for agreeing to cease (or not to undertake) production of the j-Phone5.

For example, if the entrepreneur has an entitlement to manufacture the j-Phone 5 (i.e., the neighbors cannot enjoin the factory), the neighbors may be willing to pay the entrepreneur 10 for not operating the factory. The neighbors would be willing to make this offer because the cost of the payment, 10, is less than the cost of bearing the harm, 20. The entrepreneur would be willing to accept this offer because the offer, 10, is greater than the benefits of operating the factory, -5. Thus, the entrepre-

53. See Coase, *Social Cost*, *supra* note 1, at 4–6.

54. In Column 1, both parties would be better off if the neighbors paid the entrepreneur not to operate the factory. Specifically, for any agreement between 15 and 20, the entrepreneur would be better off because any payment from the neighbors above 15 is greater than the profit the entrepreneur might obtain from operating the factory (i.e., $50 - 35 = 15$) and the neighbors would be better off because any payment below 20 is less than the external harm the factory could impose (i.e., 20). In Column 2, both parties would be better off if the entrepreneur were to pay the neighbors for the right to operate the factory. Specifically, for any agreement between 20 and 25, the entrepreneur would be better off because any payment to the neighbors less than 25 is less than the profit from operating the factory (i.e., $50 - 25 = 25$), and the neighbors would be better off because any payment to the neighbors above 20 is greater than the external harm from operating the factory (i.e., 20).

55. See Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. Chi. L. Rev. 89, 92 (1985) ("Unless investors in a firm can capture private benefits exceeding the private costs, they will not incur these costs."); Keith N. Hylton & Steven E. Laymon, *The Internalization Paradox and Workers' Compensation*, 21 Hofstra L. Rev. 109, 114 (1992) ("Private incentives are determined by comparing the private benefits with the private costs of a given action."); Richard A. Posner, *An Economic Analysis of Sex Discrimination Laws*, 56 U. Chi. L. Rev. 1311, 1315 (1989) (assuming people "consistently act to maximize the excess of their private benefits over their private costs").

neur may have an incentive to operate the factory (or threaten to do so), even though the activity is socially undesirable, -25, and even though, in the absence of the external harm and possibility of bargaining to resolve the harm, the entrepreneur's private costs, 35, exceed the private benefits, 30. Moreover, unlike in Columns 1 and 2, bargaining is ineffective for resolving this type of externality, a strategic spillover, and may result in a suboptimal outcome, even if bargaining costs are zero.⁵⁶

This example highlights several points about strategic spillovers. First, strategic spillovers involve activities that parties would not undertake but for the possibility of extracting a payment. Without a possible payment, the entrepreneur in Column 3 would not manufacture the j-Phone5. Second, strategic spillovers entail opportunistic behavior. Although manufacturing the j-Phone5 may be legal, the entrepreneur is maximizing her self-interest through a form of guile. Third, the difficulty strategic spillovers create is in distinguishing conventional externalities involving socially desirable activities from strategic spillovers. The self-interested entrepreneur in Column 2, whose activity is socially desirable, and the opportunistic entrepreneur in Column 3, whose activity is socially undesirable, are engaging in identical behavior but with different internal motivations. Fourth, bargaining is inadequate for resolving strategic spillovers. While bargaining may provide a solution for the conventional externalities in Columns 1 and 2, bargaining fails to deter the strategic spillover in Column 3. Fifth, strategic spillovers typically arise in situations involving asymmetric information.⁵⁷ The opportunistic entrepreneur in Column 3 has the ability to extract a payment by threatening to impose

56. Technically, this example does not contradict the Coase Theorem because "Coasean bargaining"—frictionless negotiation with zero transaction costs—assumes not only the absence of bargaining costs but also perfect information (whereas, as noted above, see *supra* note 50, this example assumes asymmetric information between the entrepreneur and neighbors). See Shavell, *Foundations*, *supra* note 6, at 84 n.8 (stating Coase Theorem is "sometimes expressed by saying that a mutually beneficial outcome will be achieved in the absence of *transaction costs*, where the latter are interpreted to be any hindrances to bargaining—whether literally costs of bargaining, or instead other obstacles, notably, asymmetries of information between bargaining parties"); see also Pierre Schlag, *The Problem of Transaction Costs*, 62 S. Cal. L. Rev. 1661, 1675 n.34 (1989) (noting debate over "whether extortionate behavior (which would arguably vitiate the Coase Theorem) can be subsumed under the concept of transaction costs (so as to rescue the validity of the theorem)"). But see Stewart J. Schwab, *Collective Bargaining and the Coase Theorem*, 72 Cornell L. Rev. 245, 278 (1987) ("Perfect information . . . is an unnecessary assumption that makes the Coase prediction uninteresting." (citing Jules L. Coleman, *Efficiency, Exchange, and Auction: Philosophic Aspects of the Economic Approach to Law*, 68 Calif. L. Rev. 221, 223 n.6 (1980))).

57. Cf. Smith, *Law Versus Equity*, *supra* note 38, at 9 ("Models of self-interest combined with asymmetric information can explain a lot of the behavior we would call opportunistic."). For an accessible introduction to asymmetric information, see generally Brian Hillier, *The Economics of Asymmetric Information*, at xii (1997), which explores "situations where agents on one side of the market know something that agents on the other side do not."

harm on the neighbors only if the neighbors are unaware of the private benefits and private costs of manufacturing the j-Phone5.⁵⁸

II. THE UBIQUITY OF STRATEGIC SPILLOVERS

The previous Part discussed the basic structure of strategic spillovers,⁵⁹ including the nature of opportunistic behavior,⁶⁰ and illustrated that structure with a numerical example involving pollution.⁶¹ This Part highlights the “real world” significance of strategic spillovers by examining strategic spillovers arising in property law, environmental law, intellectual property law, corporate law, legislation and regulation, and litigation and settlement. The fact that strategic spillovers are pervasive across various substantive areas of the law suggests that parties are often willing to impose harm opportunistically if it is in their interest to do so. It also suggests the law may need to differentiate conventional externalities from strategic spillovers more often than is currently the case.

A. *Property Law*

1. *Nuisance*. — It is appropriate to begin with nuisance, the area of law that Coase was investigating in *The Problem of Social Cost*.⁶² In discussing his now-famous example of a cattle-raiser and farmer who bargain to resolve social costs arising from cattle who wander onto the farmer’s land, Coase himself mentions the possibility that one party might act to induce the other to pay a higher sum in subsequent bargaining:

It might be thought that it would pay the cattle-raiser [when the cattle-raiser was not liable for damage] to increase his herd above the size that he would wish to maintain once a bargain had been made, in order to induce the farmer to make a larger

58. As this example illustrates, the problem of asymmetric information underlies many strategic spillovers. An opportunistic party (here, the entrepreneur) typically knows the private benefits and costs of engaging in an externality-generating activity. However, the potential victims (here, the neighbors) usually do not know the opportunist’s private benefits and costs. Presumably, if they had perfect information and knew the activity was not in the opportunist’s self-interest, potential victims would be unwilling to pay because, even if they refused to pay, the opportunist would not engage in the activity. And, knowing that potential victims would refuse to pay, the opportunist would not have any incentive to engage or threaten to engage in the activity (here, manufacturing the j-Phone5) in the first place. Yet, because potential victims may have imperfect information, they may decide to bargain with the opportunistic party to avoid the harm, and, knowing this, the opportunist may have an incentive to engage or threaten to engage in a strategic spillover at the outset. Moreover, as a result of asymmetric information, an opportunistic party may threaten to engage in a strategic spillover not only if the external harm is greater than the differential between the opportunistic party’s private costs and benefits but even if the external harm is less than this differential.

59. See *supra* Part I.A.

60. See *supra* Part I.B.

61. See *supra* Part I.C.

62. See Coase, *Social Cost*, *supra* note 1, at 23 (discussing “court decisions arising out of the common law relating to nuisance”).

total payment. And this may be true. It is similar in nature to the action of the farmer (when the cattle-raiser was liable for damage) in cultivating land on which, as a result of an agreement with the cattle-raiser, planting would subsequently be abandoned (including land which would not be cultivated at all in the absence of cattle-raising).⁶³

Coase recognizes the possibility that either the rancher, by buying more cattle, or the farmer, by cultivating additional land, might attempt to increase social costs for the purpose of extracting a higher payment.

After flagging the issue, however, Coase chooses not to pursue it, dismissing such strategic “manoeuvres” as mere “preliminaries to an agreement.”⁶⁴ These actions, Coase asserts, “do not affect the long-run equilibrium position, which is the same whether or not the cattle-raiser is held responsible for the crop damage brought about by his cattle.”⁶⁵ In a subsequent article on blackmail, Coase revisits the issue he acknowledged, but did not investigate, in *The Problem of Social Cost*.⁶⁶ Yet, ultimately, Coase appears rather agnostic about what, if anything, the legal system should do about this problem, in nuisance cases or otherwise.⁶⁷

As mentioned above, there are a number of historical examples involving nuisance in which one party has attempted to impose social costs on another to extract a payment. In Chicago, the “livery stable scam” was possible because courts determined whether any stable was a nuisance only after the stable was built.⁶⁸ In San Francisco, parties threatened to open breweries, bordellos, and other nuisance-like establishments in affluent neighborhoods, and such threats were feasible in the absence of land-use controls like zoning.⁶⁹ Once zoning laws separated residential parcels from commercial and industrial parcels, strategic spillovers arising from conflicting land uses were less common.

Yet, despite the advent of zoning in the early twentieth century, similar conflicts have continued to arise in certain residential areas. For ex-

63. Id. at 7–8.

64. Id. at 8.

65. Id.

66. Ronald H. Coase, The 1987 McCorkle Lecture: Blackmail, 74 Va. L. Rev. 655 (1988) [hereinafter Coase, Blackmail]. According to Coase, he mentioned the possibility of blackmail in *The Problem of Social Cost* because of a conversation he had with Harvard Law Professor David Cavers when Coase and Cavers were fellows at the Center for Advanced Study of the Behavioral Sciences at Stanford:

When I discussed my ideas with [Cavers] he pointed out, correctly, that if someone had a right to commit a nuisance, he might threaten to create that nuisance simply to extract money from those who would be harmed by it, in return of course for agreeing not to do so. In effect, Cavers felt that what I was advocating would lead to blackmail or something analogous to it.

Id. at 657.

67. See id. at 676 (concluding that whether the “British solution” for targeting blackmail by “leav[ing] it up to the prosecutors, juries, and judges to be sensible” is the “best that can be done is a question for lawyers to decide”).

68. See supra notes 8–9 and accompanying text.

69. See supra notes 13–15 and accompanying text.

ample, there are several instances in which a convicted sexual offender has attempted to extract a payment from neighbors in exchange for leaving a residential neighborhood or in which neighbors have offered to pay a convicted sex offender to relocate.⁷⁰ The difficulty in such cases, as well as with Coase's rancher and farmer, the livery stable owners in Chicago, and the operators of breweries in San Francisco, is how to distinguish merely self-interested behavior that may have incidental effects on others from opportunistic behavior in which a spillover is strategic.⁷¹

This distinction between a self-interested motivation in which external harm, even if likely to result, is not intended and an opportunistic motivation in which the harm is in fact intended is relevant for a wide variety of situations that arise in property and tort law. Notably, the Restatement (Third) of Torts: Liability for Physical and Emotional Harm includes a dual definition of "intent" in which a "person acts with the

70. In 2005, the *New York Times* published that Randall Collins and his wife had purchased a home in a new subdivision of Springdale, Arkansas. Sex Offender Sued for Slow Home Sales, *N.Y. Times*, Feb. 7, 2005, at A15 [hereinafter, *N.Y. Times*, Sex Offender Sued]. Neighbors soon learned that Collins had prior criminal convictions for sexually abusing his nieces, see *Collins v. State*, No. CACR97-407, 1998 WL 75661, at *1 (Ark. Ct. App. Feb. 11, 1998), and several residents threatened to move if Collins did not, see *N.Y. Times*, Sex Offender Sued, *supra*. Unable to sell any of the subdivision's remaining homes, the developer sued Collins, his wife, and their realtor for failing to disclose Collins's criminal history. *Id.* The complaint alleged, among other things, that Collins had called the developer and offered to leave the neighborhood in exchange for \$250,000; otherwise, Collins vowed to "stay there and kill their subdivision." *Id.*

Similarly, in 2005, the *Cincinnati Enquirer* reported how residents in Goshen, Ohio discovered that their new neighbor, David Lanford, was classified as a "sexual predator" under Ohio state law. Reid Forgrave, Sex Offender's Neighbors Giving Him Money to Move, *Cincinnati Enquirer*, Mar. 24, 2005, at C1. This time, instead of threatening to move, neighbors recruited a new buyer for Lanford's home and offered Lanford \$20,000 in "moving expenses" if he agreed to leave the community. *Id.* One local prosecutor opined that the neighbors' offer, which Lanford planned to accept, was "perfectly legal and not considered extortion." *Id.*

71. Although Collins allegedly attempted to extract a payment of \$250,000 from the developer, *N.Y. Times*, Sex Offender Sued, *supra* note 70, and neighbors allegedly offered Lanford \$20,000 to move out, Forgrave, *supra* note 70, it is unclear whether either situation involves a strategic spillover. If the reason Collins and Lanford moved to these neighborhoods had nothing to do with attempting to extract a payment, their actions would not constitute strategic spillovers. For, if their preference was to live in these particular neighborhoods, moving in was not opportunistic, and negotiating with neighbors was a way of resolving an "externality" after the fact (although query whether the external "costs" residents may experience as a result of residing near a convicted sex offender are a type of harm that society should recognize). Cf. Suzanna Hartzell-Baird, When Sex Doesn't Sell: Mitigating the Damaging Effect of Megan's Law on Property Values, 35 *Real Est. L.J.* 353, 390 (2006) (concluding "it is unlikely that a nuisance claim would be granted against a sex offender moving into a residential neighborhood" because "fear derived from someone's past capacity for criminal activity" is typically not legitimate basis for injunctive relief). On the other hand, if their preference was to live somewhere else, but Collins and Lanford purposely moved into these areas to impose harm on their neighbors and then attempt to profit from side payments, their actions would be strategic spillovers.

intent to produce a consequence if: (a) the person acts with the purpose of producing that consequence; or (b) the person acts knowing that the consequence is substantially certain to result.”⁷² Strategic spillovers, including opportunistic nuisances like the livery stable scam, are intentional under the first definition: The purpose of the activity is to cause harm (i.e., the party acts maliciously). Conventional externalities, including ordinary nuisances, are intentional but only under the second definition: Even if a harm is substantially certain to result, the purpose of the activity is not to cause the harm itself (i.e., the party does not act maliciously). The Restatement suggests there are “obvious differences” between these two motivations and distinguishes the two “to accommodate courts that in particular contexts might want to distinguish between intent in the sense of purpose and intent in the sense of knowledge.”⁷³ The distinction that the Restatement emphasizes between the two types of intent is consistent with this Article’s call to differentiate strategic spillovers and conventional externalities.

2. *Coming to the Nuisance.* — In many of the nuisance situations discussed above, the opportunistic party might have attempted to bargain with potential victims *before* initiating the externality-generating activity.⁷⁴ However, in certain circumstances, it may not be feasible for a party to bargain with potential victims until *after* initiating the externality-generating activity. Nevertheless, strategic spillovers can still arise, for an opportunistic party may consider the possibility of bargaining with victims *ex post* in deciding *ex ante* whether to engage in the activity.

One example of this type of strategic spillover arises in the context of the coming-to-the-nuisance problem.⁷⁵ Historically, a party that came to a

72. Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 1 (2010). I thank Bob Ellickson for bringing this provision to my attention.

73. *Id.* § 1 cmt. a.

74. For example, Coase asserts it would be unnecessary for a farmer actually to plant crops or a rancher to buy cattle before agreeing not to do so because “it is reasonable to suppose that someone wishing to obtain money for agreeing not to engage in an activity would normally not engage in it before negotiating, but would threaten to do so since this would be less costly.” Coase, *Blackmail*, *supra* note 66, at 657. Similarly, participants in the livery stable scam bought vacant parcels, announced their intentions to the neighborhood, and then attempted to extract payments before constructing or operating a livery stable. See *supra* note 11 and accompanying text. And, presumably, a convicted sex offender could purchase a home in a residential neighborhood and attempt to extract a payment before he or she had physically relocated.

75. See Rohan Pitchford & Christopher M. Snyder, *Coming to the Nuisance: An Economic Analysis from an Incomplete Contracts Perspective*, 19 J.L. Econ. & Org. 491, 510–11 (2003) (noting “coming to the nuisance cases” usually involve “an inability of the parties to contract over the first mover’s initial investment decision because the second mover is not yet present”). For background on the coming-to-the-nuisance problem, see generally Donald Wittman, *Coming to the Nuisance*, in 1 *The New Palgrave Dictionary of Economics and the Law*, *supra* note 35, at 292 [hereinafter Wittman, *Coming to the Nuisance*]; Donald Wittman, *First Come, First Served: An Economic Analysis of “Coming to the Nuisance,”* 9 J. Legal Stud. 557 (1980).

preexisting nuisance had no grounds for relief.⁷⁶ Most American courts now reject this categorical approach and instead consider the fact that a party has come to a nuisance as one factor among many in deciding whether to issue an injunction or award damages.⁷⁷

Suppose a firm must decide where to locate a new factory or other facility involving harmful effects such as pollution, congestion, or noise. The firm may choose (1) a location that is unlikely to conflict with future suburban development (the "rural location"); or (2) a location in which there is some probability of a conflict with future suburban development (the "exurban location"). Even if the optimal outcome is the rural location, and even if the firm would prefer the rural location, the firm might have an incentive to locate its facility in the exurban location. The reason is that the firm knows that, if the suburban development does reach its facility, it may be able to obtain a higher price from the developer or homeowners because of the social harm the firm is imposing. Here, even if the firm wanted to negotiate with potential victims before the fact, such negotiations are infeasible as the developer or homeowners are not yet known. Because such negotiations are infeasible, the firm may choose the socially undesirable location now, with the expectation that the firm might extract a payment later.

The fact that, in choosing a site for its facility, a firm may take into account the possibility of a potential conflict, as well as the likelihood of subsequent bargaining, seems to support the modern, multi-factor approach to the problem of coming to the nuisance.⁷⁸ A firm may have arrived in the exurban location before the homeowners, but the firm may have strategically taken into account the possibility of future development in deciding where to locate its factory. Thus, the firm may have anticipated the possibility that parties might later come to its externality-

76. *Mangini v. Aerojet-Gen. Corp.*, 281 Cal. Rptr. 827, 835-36 (Ct. App. 1991) ("The early common law 'coming to the nuisance' rule . . . was that if a noxious trade were established in a place remote from habitations, those who afterward acquired property in the vicinity were barred from obtaining either damages or an injunction" (quoting Cassius Kirk, Jr. Note, *Torts: Nuisance: Defenses: "Coming to the Nuisance" as a Defense*, 41 *Calif. L. Rev.* 148, 148 (1953))); see also Wittman, *Coming to the Nuisance*, *supra* note 75, at 292 ("For Blackstone, being first is everything: when the plaintiff comes to the nuisance, then the nuisance has the right to continue; when the nuisance comes to the plaintiff, then the plaintiff has the right.").

77. See, e.g., *Pre-Club, Inc. v. Elliot Inv. Corp.*, No. 17347, 1996 WL 122086, at *1 (Ohio Ct. App. Mar. 20, 1996) ("Although some jurisdictions may apply the coming to the nuisance doctrine as a complete defense to a nuisance action, the prevailing American view is that this 'defense' is just one of several factors to be considered in determining whether a nuisance exists."); Restatement (Second) of Torts § 840D (1979) ("The fact that the plaintiff has acquired or improved his land after a nuisance interfering with it has come into existence is not in itself sufficient to bar his action, but it is a factor to be considered in determining whether the nuisance is actionable.").

78. Cf. Edward Rabin, *Nuisance Law: Rethinking Fundamental Assumptions*, 63 *Va. L. Rev.* 1299, 1344 & n.116 (1977) (exploring hypothetical in which "traditional [nuisance] rule would encourage the polluter to produce smoke because the more smoke he produces the more likely he will be able" to "extort excessive profits").

generating activity and, despite this fact (indeed, because of this fact), chosen to locate its facility in a site that is socially suboptimal.⁷⁹

However, under the modern approach to coming to the nuisance, it is possible that potential victims may engage in a similar type of strategic behavior. Consider *Edwards v. Allouez Mining Co.*,⁸⁰ which Ian Ayres and Kristin Madison believe “represents a strategic ‘coming to the nuisance’ in order to extort a supercompensatory payment.”⁸¹ The plaintiff in *Edwards* purchased land being affected by the defendant’s mill, not for the purpose of using or occupying the land, but instead in an attempt to sell the land to the defendant, using the threat of injunctive relief to extract a windfall benefit.⁸² Thus, just as a firm may engage in a strategic spillover under the traditional approach by locating its facility opportunistically, a potential “victim” can engage in a strategic spillover under the modern approach by opportunistically threatening to enjoin a preexisting nuisance.⁸³ More generally, if a party has the legal right to enjoin

79. Cf. Pitchford & Snyder, *supra* note 75, at 511 (“Allocating property rights to the first mover (i.e., following a coming to the nuisance rule) leads to overinvestment by the first mover. . . . [T]he first mover strategically overinvests to improve its position in subsequent bargaining with the second mover.”). Donald Shoup, who considers the possibility that an opportunistic party may attempt to bargain either before or after initiating an externality-generating activity, emphasizes another important point: “The threat to pollute, and bargaining for a bribe not to pollute, need not, of course, come only from entrepreneurs who are in business only for such purposes.” Shoup, *supra* note 7, at 311. Shoup cites the example of how “an oil company interested in the location for a new refinery might ‘consider’ several populated sites for the purpose of being paid not to locate there, especially if it were actually indifferent among these sites on considerations of refinery profit alone.” *Id.* The possibility of a suboptimal site is a concern in many situations, in addition to the coming-to-the-nuisance problem. See, e.g., Michael Greenstone, Richard Hornbeck & Enrico Moretti, Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings, 118 *J. Pol. Econ.* 536, 550–60 (2010) (discussing locational decisions of large manufacturing plants); Herbert Mohring & J. Hayden Boyd, Analysing “Externalities”: “Direct Interaction” vs “Asset Utilization” Frameworks, 38 *Economica* 347, 354–55 (1971) (discussing locational consequences of conflicting water uses).

80. 38 Mich. 46, 46 (1878) (denying plaintiff’s injunction request where plaintiff speculatively bought land knowing sand was being deposited on it due to mill operation, attempted to sell land to mill, and, having failed, sued for injunction).

81. Ian Ayres & Kristin Madison, Threatening Inefficient Performance of Injunctions and Contracts, 148 *U. Pa. L. Rev.* 45, 51 (1999) (“[T]he peculiar facts of *Edwards* dramatize how equitable remedies may be used to extort overcompensatory settlements.” (quoting Edward Yorio, Contract Enforcement: Specific Performance and Injunctions 85 (1989))).

82. See *id.* at 50 (describing how plaintiff purchased land “‘not . . . for use or occupation, but as a matter of speculation, and apparently *under an expectation of being able to force defendant to buy it at a large advance on the purchase price*” (quoting *Edwards*, 38 Mich. at 48) (emphasis added by Ayres & Madison)).

83. See Shoup, *supra* note 7, at 311 (pointing out that “similar bargaining by ‘victim entrepreneurs’ would also seem inevitable if the polluter were made liable to the *victim* for any external costs he imposes” because “potential ‘victims’ would have an incentive to threaten to locate in polluted areas adjacent to pollution producers, in order to be bribed not to locate in such areas”). Robert Ellickson usefully distinguishes between two types of

an externality-generating activity, the party may attempt to extract a payment in exchange for not seeking an injunction, even if the party otherwise would not have invoked such a right and even though attempting to extract a payment may be socially undesirable.⁸⁴

Consequently, the coming-to-the-nuisance problem illustrates not only that “property rules” are not an adequate solution for resolving strategic spillovers, but also that strategic spillovers are possible irrespective of how property rights are initially allocated or defined. To see why, consider the Calabresi-Melamed framework for awarding legal entitlements and protecting those entitlements with property rules or liability rules.⁸⁵ Under a “Rule 3” approach, a defendant factory has an entitlement protected by a property rule.⁸⁶ But if the factory has a right to operate regardless of the social costs on its neighbors, then the factory may threaten

“coming to the nuisance” cases: (1) cases “where the plaintiff has improved his property subsequent to initiation of the nuisance”; and (2) cases “where [the plaintiff] has simply subsequently acquired [his property].” Ellickson, *Land Use Controls*, *supra* note 47, at 759 n.260. Based on this distinction, Ellickson reaches two conclusions. First, Ellickson contends that “[t]he ‘coming to the nuisance’ defense has merit . . . as a device to keep the plaintiff from aggravating his damage by installing incompatible improvements in the face of a preexisting nuisance.” *Id.* This Article supports Ellickson’s view that, in such situations, a defendant should be able to rely on this defense, regardless of whether or not the plaintiff’s failure to mitigate damages is strategic. Second, Ellickson argues that “[d]enying recovery to a plaintiff because he purchased an improvement that preexisted the nuisance is clearly erroneous, unless his predecessor in title had recovered permanent damages.” *Id.* However, under these circumstances, this Article suggests that denying recovery may sometimes be appropriate not only if the plaintiff’s predecessor recovered permanent damages, but also if, as in *Edwards*, the plaintiff strategically came to the nuisance to extract a payment.

84. See Stewart E. Sterk, *Property Rules, Liability Rules, and Uncertainty About Property Rights*, 106 Mich. L. Rev. 1285, 1285 (2008) (suggesting that “‘property rule’ protection often gives leverage to right holders disproportionate to the harm those right holders would suffer from intrusion of their rights” and that “leverage, in turn, gives potential resource users private incentives to expend time and money on search even when search will generate minimal social benefit”); cf. A. Mitchell Polinsky, *Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damage Remedies*, 32 Stan. L. Rev. 1075, 1077–78 (1980) [hereinafter Polinsky, *Resolving Nuisance*] (pointing out that one “argument against injunctive remedies is that they allow the plaintiff to ‘extort’ the defendant . . . whenever the potential cost that enforcement of the injunction would impose on the defendant exceeds the loss borne by the plaintiff if the activity in question occurs” but assuming that “extortion argument relates to the goal of distributional equity, not economic efficiency”).

85. See generally Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 Harv. L. Rev. 1089, 1090–93 (1972) (developing framework in which society must first choose which party receives entitlement, i.e., plaintiff or defendant, and then how to protect entitlement, i.e., through property rules, liability rules, or inalienability). Bracketing inalienability, which this Article discusses below, see *infra* Part IV.B.2, the Calabresi-Melamed framework yields four basic possibilities: (1) plaintiff has an entitlement protected by a property rule (“Rule 1”); (2) plaintiff has an entitlement protected by a liability rule (“Rule 2”); (3) defendant has an entitlement protected by a property rule (“Rule 3”); or (4) defendant has an entitlement protected by a liability rule (“Rule 4”). *Id.* at 1115–18.

86. See *supra* note 85 (discussing “Rule 3”).

to operate to extract a payment from neighbors in exchange for desisting. Conversely, under a “Rule 1” approach, the plaintiff neighbors have an entitlement protected by a property rule.⁸⁷ But, if the neighbors have a right to shut down the factory regardless of the social costs on the owner, then one or more of the neighbors may threaten to enjoin the factory to extract a payment in exchange for not seeking an injunction. And, in either situation, the opportunistic party may assert its entitlement even though, in the absence of the possibility of imposing social costs, the party might not have had any incentive to do so. In other words, opportunism remains a concern regardless of whether a factory has an entitlement to impose external harm or the factory’s neighbors have an entitlement to be free of external harm.⁸⁸ The use of property rules is therefore inadequate for deterring strategic spillovers because an opportunistic party may assert, or threaten to assert, an entitlement subject to property-rule protection in order to extract a payment in exchange for agreeing not to assert the entitlement.⁸⁹

3. *Spite Fences and Skyscrapers*. — Cases involving spite fences and spite structures are a situation within nuisance law in which courts do examine a party’s motivation in cases involving spite fences and spite structures. Landowners sometimes construct fences or other structures they know will impose social costs on their neighbors. These structures might interfere with access to light, prevent the circulation of air, or obstruct a particular view.⁹⁰ Under the doctrine of “ancient lights,” the common law courts of England would grant a prescriptive easement to an individual who continuously enjoyed access to light, air, or a view.⁹¹ Although initially incorporating this doctrine into their own common law traditions, American courts ultimately rejected it.⁹² American courts did,

87. See *supra* note 85 (discussing “Rule 1”).

88. I thank Terry Anderson for emphasizing the significance of this point to me in conversations at the Searle-Kauffman Institute on Law, Innovation, and Growth. On Coase’s idea of reciprocal causation and why it may mean the term “externality” is potentially misleading, see *supra* note 6.

89. Of course, it may be possible to reduce the likelihood of a strategic spillover by granting an entitlement protected by a property rule to the party that is less likely to act opportunistically, but property rules themselves do not eliminate the possibility of strategic spillovers.

90. Perhaps the most famous example is *Fontainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc.*, 114 So. 2d 357, 358 (Fla. Dist. Ct. App. 1959), in which the Fontainebleau’s owner constructed a windowless “spite wall” facing the Eden Roc hotel that cast a shadow over its pool. See Thomas W. Merrill & Henry E. Smith, *Property: Principles and Policies* 1005 (2007) (discussing case). For other colorful examples, see *Coty v. Ramsey Assocs., Inc.*, 546 A.2d 196, 201 n.1 (Vt. 1988) (“spite farm”); Steve Bailey, *A Tiny, Beloved Home that Was Built for Spite*, N.Y. Times, Feb. 29, 2008, at F6 (“spite house”).

91. See *Prah v. Maretti*, 321 N.W.2d 182, 188 (Wis. 1982) (describing doctrine of “ancient lights”).

92. See *Lucas v. Planning Bd.*, 7 F. Supp. 2d 310, 324 (S.D.N.Y. 1998) (“The English doctrine of ‘Ancient Lights’ has been universally repudiated in this nation.”); *Prah*, 321 N.W.2d at 188 (“American courts initially enforced the English common law doctrine of

however, recognize a limited number of exceptions including the “spite fence” doctrine.⁹³ This doctrine prohibits a landowner from constructing a structure that interferes with a neighbor’s access to light, air, or a view if the landowner’s motivation is spiteful or malicious.⁹⁴ Most state courts, in examining the character, location, and use of a structure, require that spite or malice be the sole, or at least the predominant, motivation for its construction.⁹⁵

A party may construct or threaten to construct a structure that interferes with a neighbor’s access to light, air, or a view not only out of malice or spite but also to extract a payment or other benefit from the neighbor.⁹⁶ For example, in the classic English case *Hardie & Lane, Ltd. v. Chilton*, the court poses the following hypothetical:

A. has land facing a new house of B.’s. A. proposes to build on that land a house which will spoil the view from or light to B.’s house and depreciate the value of his property. B. implores A. not to build. A. says: ‘I will not build if you pay me 1,000£, but I shall build if you do not.’ B. pays the money and A. does not build. Could it be seriously argued that B. could recover the money back as obtained by threats?⁹⁷

ancient lights, but later every state which considered the doctrine repudiated it as inconsistent with the needs of a developing country.”).

93. See generally Robert C. Ellickson & Vicki L. Been, *Land Use Controls: Cases and Materials* 520 (3d ed. 2005) (noting “spite fence doctrine” was one of “earliest [principles] to evolve” in “American nuisance law”); Joseph William Singer, *Property Law: Rules, Policies, and Practices* 377, 409–10 (5th ed. 2010) (discussing American courts’ willingness to recognize “spite fence” doctrine).

94. See *Prah*, 321 N.W.2d at 189 (concluding “a landowner’s interest in sunlight has been protected in this country by common law private nuisance law at least in the narrow context of the modern American rule invalidating spite fences” (citing *Sundowner, Inc. v. King*, 509 P.2d 785 (Idaho 1973); Restatement (Second) of Torts § 829 (1977))). Many states have enacted “spite-fence statutes,” which identify the circumstances in which a court may grant relief if an individual maliciously constructs a structure to interfere with another’s access to light, air, or a view. See, e.g., R.I. Gen. Laws § 34-10-20 (2011).

95. Compare *Austin v. Bald II, L.L.C.*, 658 S.E.2d 1, 3 (N.C. Ct. App. 2008) (“A spite fence is one which is of no beneficial use to the owner and which is erected and maintained solely for the purpose of annoying a neighbor.” (quoting *Welsh v. Todd*, 133 S.E.2d 171, 173 (N.C. 1963))), with *Wilson v. Handley*, 119 Cal. Rptr. 2d 263, 272 (Ct. App. 2002) (adopting “the ‘dominant purpose’ test for determining whether the ‘malice’ element of [California’s spite fence statute] has been satisfied”). But cf. Stewart E. Sterk, *Neighbors in American Land Law*, 87 Colum. L. Rev. 55, 62 (1987) (noting several cases have held that “landowners may build whatever structures they please on their own land, whatever their underlying motives, subject only to applicable zoning restrictions” (citing *Cohen v. Perrino*, 50 A.2d 348 (Pa. 1947))).

96. See, e.g., Douglas H. Ginsburg & Paul Shechtman, *Blackmail: An Economic Analysis of the Law*, 141 U. Pa. L. Rev. 1849, 1861–64 (1993) (analyzing situation in which owner may build fence higher than owner would have otherwise desired to extract payment through bargaining); Sterk, *supra* note 95, at 84 (stating if owner “can construct a fence at low cost that inflicts great hardship on his neighbor, he might be able to extract money from his neighbor to remove the fence”).

97. *Hardie & Lane, Ltd. v. Chilton*, [1928] 2 K.B. 306 (C.A.) at 316 (Eng.); cf. *Wilson v. Irwin*, 138 S.W. 373, 373–74 (Ky. 1911) (concluding defendant, “by threatening to erect,

Likewise, Mitchell Berman refers to Robert Nozick's discussion of the "deceptively tricky case" involving "B's threat to build a structure on his land that will block the view of his neighbor A, unless A pays B \$1,000."⁹⁸ The possibility of building a structure that imposes harm on one's neighbor and then bargaining for a payment not to impose such harm is another example of a strategic spillover.⁹⁹

A variation of this type of opportunistic behavior occurs in the skies above many major cities, and the stakes are often quite high.¹⁰⁰ Owners of skyscrapers and other buildings frequently oppose the construction of new structures that may affect their property. In New York City, owners of the Empire State Building objected to the planned construction of a new tower that had the potential to detract from the scenic views and iconic status of what was once the world's tallest building.¹⁰¹ Likewise, in Hong Kong, many residents feared that four new skyscrapers might obstruct the view from several office towers and a luxury hotel.¹⁰² Although some of these conflicts involve behavior that is not opportunistic, the setting is ripe for strategic spillovers. Existing owners can assert their entitlements, or at least colorable claims to such entitlements, to obstruct new construction and extract a payment from developers.

and then erecting, an unsightly and unreasonable fence," had attempted "to deter" plaintiffs from maintaining nuisance suit against his keeping dog kennels).

98. Mitchell N. Berman, *The Evidentiary Theory of Blackmail: Taking Motives Seriously*, 65 U. Chi. L. Rev. 795, 866 n.230 (1998) (citing Robert Nozick, *Anarchy, State, and Utopia* 84–85 (1974)).

99. Cf. Larry Alexander, *Is Morality Like the Tax Code?*, 95 Mich. L. Rev. 1839, 1843 (1997) (reviewing Leo Katz, *Ill-Gotten Gains* (1996)) (suggesting problem with building spite fences and undertaking similar activities "consists of intentionally exploiting another's vulnerability, making the actor better off than she would be had the victim not existed, and—importantly—making the victim worse off than she would be had the actor not existed"); Fennell, *Adjusting Alienability*, *supra* note 38, at 1454 (discussing spite fences as example in which "we may want to make the entitlement to engage in a behavior depend on one's reason for wishing to engage in it" but pointing out that "it can be very difficult to tell why a particular fence has been constructed" (citing Ward Farnsworth, *The Economics of Enmity*, 69 U. Chi. L. Rev. 211, 235 (2002))).

100. See, e.g., Raymond R. Coletta, *The Measuring Stick of Regulatory Takings: A Biological and Cultural Analysis*, 1 U. Pa. J. Const. L. 20, 41 (1998) ("In the congestion of many urban habitats, space is maximized by building upward. . . . [I]t therefore [is] not unusual for air rights to comprise the major part of a lot's value." (footnote omitted)).

101. See Charles V. Bagli, *For the King of the Skyline, a Tall and Unwelcome New Neighbor*, N.Y. Times, Aug. 26, 2010, at A1 (reporting "fierce weeklong public relations and lobbying campaign by the owners of the Empire State Building to stop the rival tower, contending that its bulky profile would scar the skyline and diminish the Empire State Building's iconic status").

102. Monday Ng, *Chief Clears Air on Tamar View Fears*, *Standard* (Hong Kong) (Oct. 15, 2005), http://www.thestandard.com.hk/news_detail.asp?pp_cat=11&art_id=3513&sid=5003520&con_type=1 (on file with the *Columbia Law Review*) ("The chief executive has taken to the airwaves to deny he has any intention of blocking sea and mountain views with the sprawling government complex proposed for the former British military headquarters site on the Tamar Basin . . .").

For example, according to David Scharf and Kristin Roy, a common strategy in New York City has been for owners to hinder or delay a development project by asserting adverse possession claims.¹⁰³ Scharf and Roy explain that, “[a]s a result of the substantial value associated with the right to develop upwards into airspace, neighboring owners often attempt to claim a right to airspace by adverse possession . . . to improperly gain leverage to extract monetary payments from eager owners and developers wishing to build upwards.”¹⁰⁴ And the strategy is often successful, as those parties “wanting to proceed expeditiously with projects in which substantial time and money have been invested often are required to make substantial cash settlements to those claiming adverse rights, thereby holding hostage the ability to develop into the disputed airspace.”¹⁰⁵ Thus, owners and developers make payments that are “nothing short of extortion” to prevent “protracted legal disputes that halt development indefinitely in the interim.”¹⁰⁶

4. *Conservation Easements and Open Spaces.* — Strategic spillovers also arise in situations involving servitudes and land-use planning. An increasing percentage of land in the United States is subject to conservation easements, servitudes that restrict the future use and development of land.¹⁰⁷ According to one estimate, “the amount of land in the United

103. See generally Y. David Scharf & Kristin T. Roy, *Adverse Possession of Airspace*, N.Y. L.J., Nov. 24, 2008, at 10 (2008).

104. *Id.*

105. *Id.*

106. *Id.* In New York, the legislature recently amended the state’s adverse possession statute to require that an adverse possessor have “a reasonable basis for the belief that the property belongs to the adverse possessor,” i.e., the adverse possessor must have acted in good faith. Act of July 7, 2008, ch. 269, sec. 1, § 501(3), 2008 N.Y. Laws 3299, 3300 (codified as amended at N.Y. Real Prop. Acts. Law § 501(3) (McKinney 2008)). The amended statute effectively “makes entrepreneurial neighbors seeking cash payments in order to permit upward development a thing of the past.” Scharf & Roy, *supra* note 103. However, although the statute attempts to address the possibility that opportunistic owners may invoke adverse possession to obstruct a development for financial gain, see Rudolph de Winter & Larry M. Loeb, *Practice Commentaries*, McKinney’s Consolidated Laws of New York Annotated, bk. 49 1/2, Real Prop. Acts. Law § 501(3), at 81 (2008) (indicating adverse possession should not be used offensively), no analogous provision prevents developers from threatening to build structures that would impose harm on existing owners and then agreeing not to build once a side payment is made. For a recent proposal regarding the external harm from the construction of skyscrapers and other urban buildings, see Edward L. Glaeser, *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier* 161 (2011) (“If tall heights create costs by blocking light or views, then form a reasonable estimate of those costs and charge the builder appropriately.”).

107. For historical and legal background on conservation easements, see generally Merrill & Smith, *supra* note 90, at 1038–41; Shea B. Airey, *Conservation Easements in Private Practice*, 44 Real Prop. Tr. & Est. L.J. 745 (2010); Zachary Bray, *Reconciling Development and Natural Beauty: The Promise and Dilemma of Conservation Easements*, 34 Harv. Envtl. L. Rev. 119 (2010); Ann Harris Smith, *Note*, *Conservation Easement Violated: What Next? A Discussion of Remedies*, 20 Fordham Envtl. L. Rev. 597 (2010); Larry Ribstein, *The Market for Conservation Law* 5–6 (Univ. of Ill. Coll. of Law, Law &

States subject to conservation easements exploded from very little in 1980 to over 5 million acres by 2003.”¹⁰⁸ Since then, the number of acres subject to easements has continued to expand dramatically, spurred in part by federal and state tax incentives.¹⁰⁹ Although there are various types of conservation easements, among the most common is a restriction that prohibits commercial development and new subdivisions, but allows existing agricultural and residential uses.¹¹⁰

However, the use of tax deductions, intended to encourage developers and land trusts to increase the number of conservation easements, has proven controversial. Specifically, some developers have received substantial tax deductions for agreeing *not* to build on certain parcels of land, including the fairways, bunkers, and putting greens of a golf course.¹¹¹ Such developers were able to obtain tax deductions for agreeing not to impose the social costs associated with development, even for lands they had no intention of developing and would have conserved in the absence of a payment.¹¹² These tax deductions illustrate that individuals and firms may undertake strategic spillovers not only to extract payments from other private parties but also to obtain subsidies and other payments from the government.

A similar phenomenon also has been occurring in densely-populated cities and towns as well as in national forests and parks. Many cities and towns are hoping to expand the amount of land devoted to open

Econ. Research Paper No. LE10-009, Pub. Law & Legal Theory Research Paper No. 09-25, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1609793 (on file with the *Columbia Law Review*).

108. Merrill & Smith, *supra* note 90, at 1038–39.

109. See Smith, *supra* note 107, at 598 (noting number of acres land trusts had preserved more than doubled between 2000 and 2005 and “increased dramatically between 2006 and 2010, during which time a special tax incentive was in place” (footnote omitted)); see also Ribstein, *supra* note 107, at 8 (noting “easements and easement statutes spread across the states following the 1976 federal income tax exemption” and citing “experimental evidence indicating that tax incentives influence the demand for easements”).

110. Merrill & Smith, *supra* note 90, at 1039.

111. See, e.g., Joe Stephens & David B. Ottaway, *Developers Find Payoff in Preservation*, *Wash. Post*, Dec. 21, 2003, at A1. According to the article:

Pennsylvania developer Kenneth C. Hellings says he restricted building on “unusable” portions of his new subdivision and took “a shocker” of a tax deduction. . . . Using guidance from a local land trust, Hellings’s lawyers wrote an easement covering a dozen islands of protected land, one as small as six-tenths of an acre. Then they placed a second easement directly on 220 acres of the golf course, including the fairways, bunkers and putting greens. The easements were accepted by the Brandywine Conservancy, a well-established Pennsylvania land trust.

Id.; see also Jessica Owley, *Changing Property in a Changing World: A Call for the End of Perpetual Conservation Easements*, 30 *Stan. Envtl. L.J.* 121, 161 n.168 (2011) (“Opportunistic acquisition dominated the beginning of most land trusts . . .”).

112. Cf. Ribstein, *supra* note 107, at 8 (asserting “the public benefit of the easements encouraged by the tax break may be disconnected from the public cost”).

space.¹¹³ To this end, municipal governments are seeking to purchase undeveloped parcels of land or the development rights to such parcels.¹¹⁴ However, realizing the municipality's interest in acquiring additional open space, landowners may act opportunistically. Specifically, even if a landowner had no intention of building on a particular parcel, the landowner may announce construction plans or commence construction to secure an elevated price, thereby making it much more costly for the municipality that is seeking to preserve the land as open space.¹¹⁵ Similarly, as the *Wall Street Journal* has documented, a real-estate broker named Thomas Chapman "has made a controversial career trading scattered parcels of private land that sit inside national forests and national parks."¹¹⁶ Mr. Chapman's strategy is simple: "[H]e talks up plans to develop the parcels," including the possibility of bulldozing the land, "[e]nvironmentalists sound the alarm," and "often, the government or conservationists come with money or a land swap to buy him out, saving the cherished parcel from development—and making Mr. Chapman money."¹¹⁷

B. *Environmental Law*

The typical concern with pollution in environmental law, as noted above, is that the owners of factories and other facilities whose byprod-

113. See Robert H. Levin, When Forever Proves Fleeting: The Condemnation and Conversion of Conservation Land, 9 N.Y.U. Envtl. L.J. 592, 617 (2001) (claiming there are "hundreds of examples of states and communities accepting higher taxes to preserve fast-disappearing open space"); A. Dan Tarlock, How California Local Governments Became Both Water Suppliers and Planners, 4 Golden Gate U. Envtl. L.J. 7, 18 (2010) ("As new suburbs [in California] expanded into farming areas near older urban areas, concern about the loss of 'open space' emerged as a 'hot' local and regional political issue."); Derald J. Hay, Comment, When Sealing the Leaks of Habitat Conservation Banking, Multiple Gaskets Are Needed: The Case for Bog Turtle in Pennsylvania, 14 Penn St. Envtl. L. Rev. 299, 325 n.161 (2006) ("Twenty municipalities in Chester County, Pennsylvania have increased taxes to purchase and preserve areas of open space to prevent subdivision and development.").

114. See Amanda Siek, Comment, Smart Cities: A Detailed Look at Land Use Planning Techniques that Are Aimed at Promoting Both Energy and Environmental Conservation, 7 Alb. L. Envtl. Outlook J. 45, 62 (2002) (discussing acquisition of development rights as "land use technique in which state or local authorities purchase a conservation easement on farmland or undeveloped open space").

115. See *id.* at 62 n.99 (noting "one drawback could be the expense required to employ a purchasing of development rights program" (citation omitted)). At the same time, local governments often have an incentive to act quickly to prevent an owner from completing construction. See Michael C. Spata, A Practical Approach to the Deductibility of a Charitable Contribution for a Qualified Conservation Easement, 22 Real Est. L.J. 132, 132-33 (1993) (describing "tendency for local government agencies to augment their inventory of open space areas by changing land use and development regulations before the developer can complete actual construction of the physical structures that were approved previously by that same local government agency").

116. Stephanie Simon, 'The Buzzard of Backcountry' Strikes It Rich in National Parks, *Wall. St. J.*, Oct. 2, 2010, at A1.

117. *Id.*

ucts may damage the air, water, natural resources, or climate may not have an incentive to internalize the harm their activities are imposing on others.¹¹⁸ But pollution may arise for another reason as well. Writing in the wake of Coase, a handful of economists observed that, theoretically, certain firms might have an incentive to become “pollution entrepreneurs” who could profit by emitting excessive pollution to extract payments from those bearing the social costs.¹¹⁹

Historically, one of the primary reasons firms did not engage in this type of opportunism is likely to be, as E.J. Mishan suggests, transaction costs.¹²⁰ It typically would have been too costly for a firm to collect payments from each individual who is bearing the external costs of its pollution.¹²¹ Even if a firm’s pollution were concentrated in a particular region, the costs of negotiating with each affected party might quickly have surpassed the gains the firm might expect to obtain. The individuals affected by the pollution also might have an incentive not to make payments and “free ride” off of their neighbors.¹²²

But the problem of “pollution entrepreneurs,” once only a theoretical possibility, is now a reality, especially in markets for greenhouse gases. These markets emerged as a result of the Kyoto Protocol’s Clean Development Mechanism (CDM). Under the CDM, companies in Annex I countries, including most European nations, are permitted to pay chemical plants in developing nations such as China to stop emitting greenhouse gases, including trifluoromethane, also known as HFC-23.¹²³

118. See *supra* Part I.A.

119. Shoup, *supra* note 7, at 310–11; see also Mishan, Postwar, *supra* note 7, at 24 (discussing possibility of “unnecessary pollution in order to extract greater tribute from the public”); Rothenberg, *supra* note 7, at 115 (hypothesizing that “negative externalities” may “lead to bribes by victims to desist”).

120. See Mishan, Postwar, *supra* note 7, at 24 (suggesting that transaction costs impede firms from producing unnecessary pollution to extract payments).

121. See *id.* at 22 (“[S]uch costs . . . increase with the dispersion of the [affected] group, and increase with the numbers involved, probably at an exponential rate.”); cf. Kaplow & Shavell, Property Rules, *supra* note 30, at 749 (“Bargaining appears to have relatively little importance in the context of industrial pollution because, as is often stated, victims of pollution are unlikely to bargain with those responsible for it.”).

122. On free riders, which here are actually beneficial in deterring opportunism, see generally Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* 6 (1990) (“Whenever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on the efforts of others.”); Russell Hardin, The Free Rider Problem, in *Stanford Encyclopedia of Philosophy* (Edward N. Zalta ed., 2008), <http://plato.stanford.edu/archives/fall2008/entries/free-rider/> (on file with the *Columbia Law Review*) (describing phenomenon of free riding).

123. See Kyoto Protocol to the United Nations on Climate Change, art. 12, Dec. 11, 1997, 2303 U.N.T.S. 162 (defining CDM); McGivern, *supra* note 17, at 26–27 (explaining operation of CDM). HFC-23 is a byproduct of manufacturing HCFC-22, a common refrigerant used in heat pump and air conditioning systems. For more on HCFCs and their planned phase-out under the Montreal Protocol, see What You Should Know About Refrigerants When Purchasing or Repairing a Residential A/C System or Heat Pump,

Scientists estimate that, because of its potential to contribute to global warming, HFC-23 is approximately 11,700 times worse for the environment than carbon dioxide.¹²⁴ Thus, under the CDM, eliminating one ton of HFC-23 earns a plant 11,700 tons of carbon offset credits, also known as “Certified Emission Reductions” (CERs).¹²⁵ To avoid emitting HFC-23 into the atmosphere, Chinese industrial plants are capable of incinerating the gas. In early 2008, carbon credits were trading at around \$25 per ton, so incinerating one ton of HFC-23 created a benefit of almost \$300,000 (i.e., 11,700 x \$25), even though the cost of doing so was only \$5,000 per ton.¹²⁶

As a result, speculation arose that certain “Chinese companies have built chemical plants mainly to cash in on carbon credits.”¹²⁷ In late 2006, the *New York Times* reported that a United Nations study had found that the profits from destroying HFC-23 were “enormous” and that “industrial nations could pay \$800 million a year to buy credits, even though the cost of building and operating incinerators will be only \$31 million a year.”¹²⁸ Several academics, including Michael Wara and David Victor, also highlighted the problem.¹²⁹ Ultimately, in response to mounting pressure from several nongovernmental organizations,¹³⁰ the United Nations halted the issuance of CERs for five Chinese plants suspected of engaging in excessive production to generate additional HFC-23.¹³¹ And, recently, several members of the CDM Executive Board recommended “that the procedure of issuing U.N. carbon credits to industrial gas projects which destroy [HFC-23] should be revised.”¹³²

Env'tl. Prot. Agency, <http://www.epa.gov/ozone/title6/phaseout/22phaseout.html> (on file with the *Columbia Law Review*) (last updated Aug. 19, 2010).

124. Stoft, *supra* note 20, at 212.

125. *Id.*

126. *Id.*

127. *Id.*

128. Keith Bradsher, *Outsize Profits, and Questions, in Effort to Cut Warming Gases*, *N.Y. Times*, Dec. 21, 2006, at A1.

129. Michael W. Wara & David G. Victor, *A Realistic Policy on International Carbon Offsets 11* (Stanford Univ., Program on Energy & Sustainable Dev., Working Paper No. 74, 2008), available at http://iis-db.stanford.edu/pubs/22157/WP74_final_final.pdf (on file with the *Columbia Law Review*) (noting “CDM Executive Board implemented a number of restrictions that limited, but failed to eliminate, the perverse incentive” resulting from HFC-23 capture being more valuable than refrigerant gas production).

130. See, e.g., Press Release, CDM Watch, *UN Delays Action on Carbon Market Scandal* (July 30, 2010), http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/07/Press-Release_CDM-Panel-Calls-for-Investigation-over-Carbon-Market-Scandal.pdf (on file with the *Columbia Law Review*) (“A coalition of environmental NGOs warned today that the UN CDM Executive Board is avoiding immediate and necessary action to address scandalous gaming of the Kyoto Protocol’s Clean Development Mechanism because of conflicts of interest in the Board.”).

131. See *supra* note 16 and accompanying text.

132. Nina Chestney, *UN Panel Backs Revision to Issuing of HFC-23 Offsets*, *Reuters* (Nov. 24, 2010, 9:58 PM), <http://af.reuters.com/article/energyOilNews/idAFLDE6AN20420101124> (on file with the *Columbia Law Review*).

Operators of industrial gas plants in China are not alone. Steven Stoft documents how operators of a coal-fired power plant in South Africa engaged in a similar scheme.¹³³ These operators “said they would keep using dirty coal unless they got carbon credits to buy some natural gas instead.”¹³⁴ But they had “signed a gas contract before the CER policy went into effect. That is, they had already planned to cut their carbon dioxide emissions. They were simply hoping to defraud the United Nations”¹³⁵ Stoft points out that firms may take such actions even if they do not intend to act strategically: “Whoever takes most advantage of [CERs] makes the most profit and can sell their product for less and undercut their competition. Businessmen fear their competitor will employ such a strategy, and so, in self-defense, they feel they must employ it themselves.”¹³⁶

The difficulty with regulating HFC-23 production in China and coal production in South Africa is in distinguishing between those actions that represent actual reductions of greenhouse gases that would not have been undertaken but for the carbon credits and those actions that represent apparent reductions in greenhouse gases that would have been undertaken even in the absence of carbon credits. This problem suggests the need, as many environmental law scholars now recognize, for defining and implementing a “principle of additionality.”¹³⁷ A principle of additionality would provide a mechanism for distinguishing between projects that would not occur in the absence of the subsidy (i.e., that are “additional”), and thus that the government may have an interest in subsidizing, and projects that would occur in the absence of the subsidy (i.e., that are not “additional”), and thus that the government probably has no interest in subsidizing.¹³⁸

133. Stoft, *supra* note 20, at 211.

134. *Id.*

135. *Id.*

136. *Id.* at 212.

137. See Carol M. Rose, *Big Roads, Big Rights: Varieties of Public Infrastructure and Their Impact on Environmental Resources*, 50 *Ariz. L. Rev.* 409, 438 (2008) (describing “Kyoto insistence that forestry and other so-called clean development credits meet the criterion of ‘additionality’—that they be some measure in addition to what was going to happen anyway”); Robert N. Stavins, *A Meaningful U.S. Cap-and-Trade System to Address Climate Change*, 32 *Harv. Envtl. L. Rev.* 293, 323 (2008) (noting that “because of concerns about additionality and related perverse incentives, the role of project-based offsets should be defined carefully”).

138. See David M. Driesen, *Sustainable Development and Market Liberalism’s Shotgun Wedding: Emissions Trading Under the Kyoto Protocol*, 83 *Ind. L.J.* 21, 57 n.208 (2008) (“Because many energy efficiency projects are economically attractive on their own, they have difficulty satisfying this [additionality] criterion.”); cf. Tom Baker & Peter Siegelman, *Tontines for the Invincibles: Enticing Low Risks into the Health-Insurance Pool with an Idea from Insurance History and Behavioral Economics*, 2010 *Wis. L. Rev.* 79, 102 n.78 (“To the extent that one uses subsidies to alter behavior, any money directed towards those already engaged in the desired behavior is a waste. In tax policy, the problem of subsidizing pre-existing conduct while trying to create incentives for new behavior is known as ‘buying the base.’”).

To be sure, instead of subsidizing reductions, the government could impose a corrective tax so each firm would be forced to internalize the harm it is generating.¹³⁹ The corrective tax approach, which this Article discusses below,¹⁴⁰ recognizes that, by engaging in an activity that involves pollution, a firm is imposing harm on others and attempts to force the firm to internalize this harm. However, as commentators have noted, a corrective tax of a significant magnitude may not be a feasible option for forcing firms to internalize their externalities.¹⁴¹ Given these constraints, governments may continue to rely on subsidies to encourage reductions, an approach that increases the likelihood that modern-day “pollution entrepreneurs” will engage in this type of opportunism.¹⁴²

C. *Intellectual Property Law*

This type of opportunistic behavior is also common in the world of intellectual property. Cases involving “cybersquatters,” which initially arose under trademark and unfair competition law, are an example.¹⁴³ A “cybersquatter” is an individual who “knowingly reserves with a registrar a

139. See, e.g., Louis Kaplow & Steven Shavell, *On the Superiority of Corrective Taxes to Quantity Regulation*, 4 *Am. L. & Econ. Rev.* 1, 2 (2002) [hereinafter Kaplow & Shavell, *Corrective Taxes*] (arguing “traditional notion of the superiority of corrective taxes should continue to be a benchmark for economists’ thinking about the control of externalities”).

140. See *infra* Part IV.A.4 (examining corrective taxes, as well as liability rules, as solution for strategic spillovers).

141. See, e.g., Barton H. Thompson, Jr., Foreword, *The Search for Regulatory Alternatives*, 15 *Stan. Envtl. L.J.*, at viii, xix (1996) (noting that, while direct incentives such as taxes may be “more dynamic than marketable permit systems,” they are “politically less feasible”); cf. J.R. DeShazo & Jody Freeman, *Timing and Form of Federal Regulation: The Case of Climate Change*, 155 *U. Pa. L. Rev.* 1499, 1544–45 (2007) (arguing “stronger industry consensus [will] emerge in favor of cap-and-trade”).

142. Obviously, externalities can include visual pollution (e.g., aesthetic blight) or audio pollution (e.g., loud noises) as well as air and water pollution. And, the same type of opportunistic behavior is possible. For example, in analyzing eminent domain, Lee Fennell discusses the “particularly troubling” situation in which owners of blighted property might share in an assembly’s surplus. Lee Anne Fennell, *Taking Eminent Domain Apart*, 2004 *Mich. St. L. Rev.* 957, 985. Fennell notes that “[t]he incentives for extortionate behavior are clear enough if people are allowed to create bad situations and then glean some of the surplus associated with relieving the negative condition.” *Id.* She compares such situations to a claim that “someone who is making hideous music on the sidewalk has a right to some of the surplus associated with stopping the racket.” *Id.* (citing Randy Cohen, *The Ethicist: Pay for No Play?*, *N.Y. Times Mag.*, Nov. 28, 2004, at 66); see also Fennell, *Adjusting Alienability*, *supra* note 38, at 1453–54 (discussing “resident [who] plays her trombone very poorly” and observing “it is almost impossible to distinguish musicians in the early stages of their training from opportunists hoping to extract payments from their annoyed neighbors”).

143. See H. Brian Holland, *Tempest in a Teapot or Tidal Wave? Cybersquatting Rights and Remedies Run Amok*, 10 *J. Tech. L. & Pol’y* 301, 311 (2005) (“The first attempts to dislodge cybersquatters utilized traditional trademark and related actions: direct trademark infringement and unfair competition, dilution, and secondary liability (contributory infringement and vicarious liability).” (citing Jennifer Golinveaux, *What’s in a Domain Name? Is “Cybersquatting” Trademark Dilution?*, 33 *U.S.F. L. Rev.* 641, 654–55 (1999))).

domain name consisting of the mark or name of a company for the purpose of relinquishing the right to that domain name back to the legitimate owner for a price.”¹⁴⁴ For example, in *Intermatic Inc. v. Toeppen*, plaintiff Intermatic, a company that had been manufacturing and distributing a variety of electrical and electronic products since 1941, brought suit under federal and state trademark and unfair competition laws against defendant Dennis Toeppen.¹⁴⁵ Toeppen operated an internet service provider and registered approximately 240 domain names including “deltaairlines.com,” “crateandbarrel.com,” “ramadainn.com,” “great-america.com,” and “ussteel.com,” as well as “intermatic.com,” the subject of the litigation.¹⁴⁶ But for the possibility of extracting a payment for resale or licensing, it is unlikely that Toeppen would have expended the time and effort necessary to register “intermatic.com” and hundreds of other domain names.¹⁴⁷ The court ultimately enjoined Toeppen from using the “intermatic.com” domain name.¹⁴⁸

Congress eventually attempted to address the issue more systematically in the Anticybersquatting Consumer Protection Act (ACPA).¹⁴⁹ Under ACPA, “a person shall be liable in a civil action by the owner of a mark” if that person “(i) has a bad faith intent to profit from that mark” and “(ii) registers, traffics in, or uses a domain name” that is “identical or confusingly similar to that mark”¹⁵⁰ However, considerable controversy remains over how to distinguish a legitimate owner of a domain name, who may harm other businesses as an incidental byproduct of such ownership, and a cybersquatter who is engaging in a strategic spillover.¹⁵¹ The distinction turns, as the Act indicates, on the concept of “bad faith,” but, in many circumstances, bad faith may be difficult to define as well as to detect.¹⁵²

144. 4 J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition § 25:77 (4th ed. 2008).

145. 947 F. Supp. 1227, 1229 (N.D. Ill. 1996).

146. *Id.* at 1229–30.

147. See *id.* at 1230 (“One of Toeppen’s business objectives is to profit by the resale or licensing of these domain names, presumably to the entities who conduct business under these names.”); *id.* at 1233 (“At no time did Toeppen use intermatic.com in connection with the sale of any available goods or services. At no time has Toeppen advertised the intermatic.com domain name in association with any goods or services.”).

148. *Id.* at 1241.

149. Pub. L. No. 106-113, § 3002(a), 113 Stat. 1501, 1501A-545 (1999) (codified at 15 U.S.C. § 1125(d) (2006)).

150. *Id.*

151. Cf. Orion Armon, Note, Is This as Good as It Gets? An Appraisal of ICANN’s Uniform Domain Name Dispute Resolution Policy (UDRP) Three Years After Implementation, 22 Rev. Litig. 99, 110 (2003) (pointing out that “fundamental disagreements regarding which types of domain name registration practices are acceptable and which are not remain largely unresolved”).

152. See Natalia Ramirez, Note, Will the Anticybersquatting Consumer Protection Act Create More Problems than It Solves?, 8 Wash. U. J.L. & Pol’y 395, 396 (2002) (arguing ACPA, by relying on “traditional trademark infringement and dilution principles to determine whether a person has infringed or diluted the mark in bad faith[,] . . . merely

Strategic spillovers are also prevalent in patent law. For example, a “patent troll” may rely on an erroneously issued patent to extract a payment or licensing fee from a company that has independently discovered the same invention. As Doug Lichtman and Mark Lemley point out, “a large and growing number of ‘patent trolls’ today play this exact strategy, using patents on obvious inventions quite literally to tax legitimate business activity.”¹⁵³ By acquiring patents they do not intend to use, patent trolls may purposely harm legitimate businesses attempting to license multiple patents for a new product.¹⁵⁴ The difficulty, once again, is how to determine whether a patent holder that is not practicing a patent is sitting on the sidelines for a legitimate reason or an opportunistic one.¹⁵⁵

Like patent trolls, patent thickets involve situations in which a party may impose harm purposely to extract a payment or gain a competitive advantage. A patent thicket is “an overlapping set of patent rights requiring that those seeking to commercialize new technology obtain licenses from multiple patentees.”¹⁵⁶ Patentees sometimes use their patent rights and intellectual property portfolios strategically,¹⁵⁷ and, if a party seeking to develop a life-saving drug or other product is required to assemble licenses from several parties, a patentee may “hold up” a project oppor-

codifies existing cybersquatting case law, which scarcely addresses the difficult issue created when both parties have a valid claim to the same domain name”); cf. Armon, *supra* note 151, at 110 (noting disagreements persist “partly because a key element in a cybersquatting claim—bad faith—is notoriously difficult to define and prove”). For more on this controversy, see Maired Moore, *Cybersquatting: Prevention Better than Cure?*, 17 *Int’l J.L. & Info. Tech.* 220, 220, 228 (2009) (examining “legal mechanisms that have been employed to deal with cybersquatting” and arguing prevention at registration stage will be necessary to curb such activity).

153. Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law’s Presumption of Validity*, 60 *Stan. L. Rev.* 45, 48 (2007).

154. For more on patent trolls, see generally John M. Golden, *Commentary*, “Patent Trolls” and Patent Remedies, 85 *Tex. L. Rev.* 2111, 2114 (2007) (arguing against categorical denial of injunctive relief to noncompeting patent holders); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 *Notre Dame L. Rev.* 1809, 1811 (2007) (comparing “patent trolls” with nineteenth century agricultural “patent sharks” to derive lessons about particularly vulnerable patents and potential remedies); J. Jason Williams, Mark V. Campagna & Olivia E. Marbutt, *Strategies for Combating Patent Trolls*, 17 *J. Intell. Prop. L.* 367, 368 (2010) (focusing on adjusting risks and costs of patent litigation against trolls).

155. Cf. Greg Halsey, *Comment*, *There Is a Pink Elephant at Our Patent Negotiation, and His Name Is Declaratory Judgment*, 46 *San Diego L. Rev.* 247, 275 (2009) (“In declaratory judgment cases, the only way courts can distinguish between aggressive patent trolls and quiescent patent holders is through the application of prudential considerations.”).

156. Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting*, in *1 Innovation Policy and the Economy* 119, 119 (Adam B. Jaffe, Josh Lerner & Scott Stern eds., 2001).

157. See generally Daniel R. Rubinfeld & Robert Maness, *The Strategic Use of Patents: Implications for Antitrust*, in *Antitrust, Patents and Copyright: EU and US Perspectives* 85, 86 (Francois Leveque & Howard Shelanski eds., 2005) (discussing strategic uses of IP portfolios to compete with rivals).

tunistically.¹⁵⁸ The patentee may do so to extract license payments from competitors, to deter potential competitors from entering a market, or to obstruct competitors from innovating.¹⁵⁹ And patent thickets are a perennial concern, from the sewing machine¹⁶⁰ to nanotechnology,¹⁶¹ although scholars disagree on the scope of the problem.¹⁶²

Finally, although prior use of the term “strategic spillovers” is relatively rare, the literature on knowledge spillovers in patent law is one of the few areas in which scholars have utilized this phrase.¹⁶³ The structure of strategic knowledge spillovers is similar to the general structure of strategic spillovers discussed above.¹⁶⁴ However, strategic knowledge spillovers entail an additional twist because, paradoxically, a party that strategically discloses information is able to help itself and (ultimately) may hurt its rival by freely providing the rival with valuable information:

[T]he fact that patent applications are evaluated in light of the prior art gives firms a strategic incentive to create prior art. A firm can publish a journal article or engage in a public demonstration and in that way affect both a rival’s ability to patent a related invention and the rival’s incentive to do so. Perhaps surprisingly, this can make the disclosing firm better off even

158. See Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 *Science* 698, 698 (1998) (discussing anticommons in patent); see also Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 *Harv. L. Rev.* 621, 623–24 (1998) (discussing anticommons in general).

159. See Jonathan M. Barnett, *Private Protection of Patentable Goods*, 25 *Cardozo L. Rev.* 1251, 1300 n.175 (2004) (describing James Bessen’s view that most patenting is “‘strategic patenting’—that is, patents that are taken out . . . to create a ‘patent thicket’ by which the holder . . . can extract license payments from potential competitors, deter entry from potential competitors, or hold up innovation by potential competitors”).

160. See generally Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 *Ariz. L. Rev.* 165, 168 (2011) (“[T]he explicit identification of the Sewing Machine War as a patent thicket . . . will be of significant interest to patent and property scholars today.”).

161. See Mark A. Lemley, *Patenting Nanotechnology*, 58 *Stan. L. Rev.* 601, 630 (2005) (discussing how law might “ameliorate the risk of a nanotechnology patent thicket” by changing “rules that encourage opportunistic holdup”).

162. Compare Michael Heller, *The Gridlock Economy: How Too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives* 6 (2008) (“Research scientists have whispered to me about other potential cures blocked by a multiplicity of patent owners. These missing drugs are a silent tragedy. Millions have suffered and will continue to suffer or die from diseases that could have been treated or prevented . . .”), with Richard A. Epstein, *Heller’s Gridlock Economy in Perspective: Why There Is Too Little, Not Too Much Private Property*, 53 *Ariz. L. Rev.* 51, 74–82 (2011) (discussing patent thickets and taking more skeptical view of extent to which patents cause gridlock).

163. See, e.g., Giovanni De Fraja, *Strategic Spillovers in Patent Races*, 11 *Int’l J. of Indus. Org.* 139 (1993); see also Dietmar Harhoff, *Strategic Spillovers and Incentives for Research and Development*, 42 *Mgmt. Sci.* 907, 907 (1996) (developing “model in which a monopolist supplier can contribute to downstream product improvements by creating knowledge spillovers which downstream firms use as a substitute for their own R&D efforts”).

164. See *supra* Part I.

though, by revealing information, the firm is likely helping its rival and, worse, narrowing or even fully preempting the very patent it seeks.¹⁶⁵

As with strategic spillovers more generally, the possibility of strategic knowledge spillovers may result in "private negotiations" with the strategic party "agreeing not to disclose and in exchange receiving from the ultimate patentee some form of favorable licensing agreement."¹⁶⁶

D. *Corporate Law*

Parties also engage in activities that are similar to the strategic spillovers described above in several situations in corporate law including hostile takeovers, shareholder initiatives, and cumulative voting.

For example, a party may threaten to engage in a hostile takeover for purposes of "greenmailing" a company's managers.¹⁶⁷ In *Heckmann v. Ahmanson*, a California appellate court explained how "[a] greenmailer creates the threat of a corporate takeover by purchasing a significant amount of the company's stock [and] then sells the shares back to the company at a premium when its executives, in fear of their jobs, agree to buy him out."¹⁶⁸ Greenmail is usually thought to be problematic if it is initiated solely to extract a payment.¹⁶⁹ However, certain forms of "greenmail" may be socially desirable. Stephen Bainbridge, citing prior work by Jonathan Macey and Fred McChesney, notes that "greenmail actually may be beneficial in that it may allow the board to seek higher bids or to enhance value (above the greenmail bidder's price) by making changes in management or strategy."¹⁷⁰ As a result, "a greenmailer may be a catalyst for change from within or for a bidding war and may therefore deserve to make a profit."¹⁷¹ The difficulty, once again, is determining whether a party threatening a hostile takeover is acting out of self-interest in a manner that may be socially desirable or is undertaking a socially wasteful action to extract a payment.

165. Douglas Lichtman, Scott Baker & Kate Kraus, Strategic Disclosure in the Patent System, 53 Vand. L. Rev. 2175, 2175-76 (2000).

166. *Id.* at 2176.

167. See Jeffrey N. Gordon & Lewis A. Kornhauser, Takeover Defense Tactics: A Comment on Two Models, 96 Yale L.J. 295, 311 (1986) ("A targeted share repurchase, or greenmail, is the buyback of the shares owned by a particular shareholder of the target who has made, or threatened, a takeover bid.").

168. 214 Cal. Rptr. 177, 180 n.1 (Ct. App. 1985).

169. See Gordon & Kornhauser, *supra* note 167, at 311 (noting "standard account of greenmail . . . argues that greenmail serves management entrenchment objectives only; that is, that management, which has mismanaged target assets, pays greenmail in order to perpetuate its ability to exploit the target").

170. Stephen M. Bainbridge, *Unocal* at 20: Director Primacy in Corporate Takeovers, 31 Del. J. Corp. L. 769, 792 n.98 (2006) (citing Jonathan R. Macey & Fred S. McChesney, A Theoretical Analysis of Corporate Greenmail, 95 Yale L.J. 13, 15-16 (1985); Fred S. McChesney, Transaction Costs and Corporate Greenmail: Theory, Empirics and a Mickey Mouse Case Study, 14 Managerial & Decision Econ. 131, 133-34 (1993)).

171. *Id.*

Similarly, corporate shareholders may use shareholder initiatives for benevolent or malevolent purposes. On one hand, Lucian Bebchuk is optimistic about the role of shareholders and “presents the case for giving shareholders the power not only to elect and replace directors, but also to initiate and adopt rules-of-the-game decisions to amend the corporate charter or to reincorporate in another jurisdiction.”¹⁷² On the other hand, shareholders also may utilize the initiative process to extract payments in exchange for not imposing harm on the corporation or its managers. As Jeffrey Gordon emphasizes, shareholder initiatives create “an opportunity for shareholders to pursue private wealth maximization through bargaining with managers.”¹⁷³ Gordon explains:

Shareholders can threaten to make a shareholder initiative that has some probability of success, or having made the initiative, can suggest a willingness to withdraw it, and thereby induce managers with valuable agency benefits to use the firm’s resources to buy them out at a premium over market or make other transfers.¹⁷⁴

This type of shareholder initiative, Gordon concludes, “may make it possible to extract greenmail-like payments from the firm.”¹⁷⁵

There is also a debate among corporate scholars about the ways in which parties might use (or abuse) cumulative voting in corporate governance.¹⁷⁶ One of the concerns about cumulative voting is that “a minority stockholder might use board access and the threat of disruption to hold up the corporation for greenmail.”¹⁷⁷ Indeed, as Jeffrey Gordon admits, courts historically “did not police such potential uses of cumulative voting.”¹⁷⁸ However, Gordon claims that commentators should take a “new look” at the benefits of cumulative voting.¹⁷⁹ He argues that “activist institutions” are likely “to use power added by cumulative voting to pursue strategies that will increase share values, producing gains that are common to all shareholders, rather than to extract private gains, such as greenmail.”¹⁸⁰ Of course, it may be difficult to know in advance whether

172. Lucian Arye Bebchuk, *The Case for Increasing Shareholder Power*, 118 *Harv. L. Rev.* 833, 837 (2005).

173. Jeffrey N. Gordon, *Shareholder Initiative: A Social Choice and Game Theoretic Approach to Corporate Law*, 60 *U. Cin. L. Rev.* 347, 381 (1991).

174. *Id.*

175. *Id.*

176. Cumulative voting is “a vehicle for proportional board representation of significant shareholder minorities” and was a “common feature in corporate governance until the managerialist assaults of the 1950s.” Jeffrey N. Gordon, *Institutions as Relational Investors: A New Look at Cumulative Voting*, 94 *Colum. L. Rev.* 124, 127 (1994); see also *id.* at 127 n.8 (explaining mechanics of cumulative voting in corporate law).

177. *Id.* at 167.

178. *Id.* at 167 n.139 (citing *Chi. Macaroni Mfg. v. Boggiano*, 67 N.E. 17 (Ill. 1903); *Tomlin v. Farmers & Merchs. Bank*, 52 Mo. App. 430 (1893)).

179. *Id.* at 124.

180. *Id.* at 128; see also Bernard Black & Reinier Kraakman, *A Self-Enforcing Model of Corporate Law*, 109 *Harv. L. Rev.* 1911, 1947 (1996) (arguing cumulative voting

these institutions will use cumulative voting to act in a self-interested way that also increases value for other shareholders or to act opportunistically to extract private benefits for themselves.

E. *Legislation and Regulation*

Strategic spillovers also arise in the legislative or regulatory process. Legislators or regulators have the ability to impose costs on several types of parties, including (1) a party that benefits from a cartel or existing regulation (by threatening to deregulate), (2) a party that benefits from the absence of regulation (by threatening to regulate), or (3) a party that is seeking regulatory approval (by threatening to withhold approval or by allowing objectors to delay the process). The ability to impose these costs provides a chance for opportunistic legislators or regulators, as well as others who may be capable of influencing the substance or timing of legislation or regulation, to extract payments in exchange for not imposing such harm.

In the legislative process, Fred McChesney has observed that "payments to politicians often are made, not for particular political favors, but to avoid particular political disfavor, that is, as part of a system of political extortion, or 'rent extraction.'"¹⁸¹ According to McChesney, politicians may threaten to enact legislation for which they would not have voted in order to extract campaign contributions or other benefits from a particular constituency that the new law might burden.¹⁸² Similarly, but more

"provides access to company information," "makes it more likely that a minority of directors is truly independent of management," and "reinforces the principle that directors owe their loyalty to shareholders, not to the company's officers").

181. Fred S. McChesney, *Money for Nothing: Politicians, Rent Extraction, and Political Extortion* 2 (1997) [hereinafter *McChesney, Money for Nothing*]. McChesney provides an example:

The political strategy of cost forbearance can assume several forms. Perhaps most obvious is the threat to deregulate an industry previously cartelized. Expected political rents created by earlier regulation are quickly capitalized into firm share prices. If politicians later breach their contract and vote unexpectedly to deregulate, shareholders suffer a wealth loss. Rather than suffer the costs of deregulation, shareholders will pay politicians a sum, up to the amount of wealth loss threatened, to have them refrain from deregulating. And in fact one routinely observes payments to politicians to protect previously enacted cartel measures. Dairy interests pay handsomely for continuation of congressional milk-price supports; physician and dentist political action committees (PACs) contribute large sums for continuation of self-regulation.

Id. at 23 (citing Larry J. Sabato, *PAC Power: Inside the World of Political Action Committees* 133-37 (1984)).

182. See id. at 45-68 (examining different forms of payment from private groups to politicians and describing how politicians extract rents by threats); see also Fred S. McChesney, *Rent Extraction and Rent Creation in the Economic Theory of Regulation*, 16 J. Legal Stud. 101, 117 (1987) ("Status as a legislator confers a property right not only to create political rents but also to impose costs that would destroy private rents."). McChesney points out that the "extraction option is not mere blackboard economics" and that "politicians practice rent extraction routinely." McChesney, *Money for Nothing*, supra

recently, Guy Halfteck has suggested that “the legislative process is frequently used solely to exert threats of impending legislation rather than to enact a legislative measure.”¹⁸³ Like McChesney, Halfteck argues that legislators sometimes undertake these types of legislative threats to obtain campaign contributions and extract other types of political rents.¹⁸⁴ This type of “political extortion” has real effects on firms and market participants.¹⁸⁵ And, as Halfteck documents, it appears that “[t]he prevalence of legislative threats incorporates all areas of activity, ranging from cybersecurity and e-piracy to digital obscenity and air pollution; from executive compensation and money laundering to obesity and illegal substances.”¹⁸⁶

In the regulatory process, parties also may challenge various types of regulatory approvals. Some parties do so not because they have an interest in preventing the grant of a license to a party, but to extract a payment from the party in exchange for ceasing their opposition. For example, one observer of the communications industry notes: “Frequently, challenges to license renewals are mounted by persons who have no interest in broadcasting. The purpose of mounting a challenge is to obtain a payoff from the licensee in exchange for dropping the challenge.”¹⁸⁷ Likewise, two decades ago, one commentator noted that, under the Community Reinvestment Act,¹⁸⁸ any individual could “submit to regulatory authorities objections to bank mergers, acquisitions, and branch

note 181, at 29. He notes that “[m]ilker bills’ is one term used by politicians to describe legislative proposals intended only to ‘milk’ private producers for payments not to pass the rent-extracting legislation.” *Id.* He also quotes an earlier paper by William Stubblebine in which Stubblebine vividly describes the practice of “milker bills” in the California State Legislature. *Id.* at 29–30; see also Carol M. Rose, *Crystals and Mud in Property Law*, 40 *Stan. L. Rev.* 577, 591 (1988) [hereinafter *Rose, Crystals and Mud*] (discussing how “interest groups will bid for whatever ‘asset’ is the object of the decision-maker’s discretionary choice”).

183. Guy Halfteck, *Legislative Threats*, 61 *Stan. L. Rev.* 629, 647 (2008); see also *id.* at 664 (“In view of their prevalence, it stands to reason that legislators benefit from exerting threats and, furthermore, that these benefits exceed the costs undertaken by doing so.”).

184. See *id.* at 664 n.145 (“Paying rents essentially compensates the legislator for not exercising his power to charge individuals and firms for the right to keep capital they have amassed and wealth they have produced. Rents take many forms, including campaign contributions, speaking honoraria, and in-kind benefits.” (citation omitted)).

185. See R. Beck, C. Hoskins & J.M. Connolly, *Rent Extraction Through Political Extortion: An Empirical Examination*, 21 *J. Legal Stud.* 217, 223 (1992) (demonstrating Canadian firms suffered negative stock returns following announcement of potential adverse government action).

186. Halfteck, *supra* note 183, at 647.

187. Donald L. Bell, *Unbundling: An Alternative to the Current System of Cable Television Franchising*, 21 *Cumb. L. Rev.* 43, 70 n.127 (1990).

188. 12 U.S.C. §§ 2901–2907 (2006).

openings or closings.”¹⁸⁹ The commentator claimed that, because “objections result in administrative proceedings which, in turn, entail substantial costs and delay, financial institutions induce community activists to withdraw their objections by paying bribes in the form of low-cost loans and mortgages, donations for housing projects, and contributions to community groups.”¹⁹⁰ Obviously, in the wake of the mortgage crisis, this claim is significant, albeit extremely controversial.¹⁹¹ And, although it is difficult to know the motivation of any individual or organization that launched (or threatened to launch) an objection, *Business Week* reported at the time that “[b]etween 1986 and 1988, banks ‘pledged’ more than \$5 billion in response to activists’ complaints.”¹⁹²

F. *Litigation and Settlement*

Strategic spillovers also arise during the litigation process itself. For example, a plaintiff may file a negative expected value suit for its nuisance value.¹⁹³ Lucian Bebchuk explains that in many cases “the potential plaintiff recognizes that the expected value to him of going to trial is negative. This might be the case either because the chances of winning a trial are small (the suit is ‘frivolous’) or because the expected judgment is

189. Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 *Tul. L. Rev.* 339, 389 (1990).

190. *Id.* at 389–90.

191. Compare David G. Tarr, *The Political, Regulatory, and Market Failures that Caused the US Financial Crisis 10* (World Bank, Policy Research Working Paper No. 5324, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1322297 (on file with the *Columbia Law Review*) (“The real problem is that once bank regulators initiated changes in enforcing the Community Reinvestment Act to require banks to lower underwriting standards, they could hardly oppose similar loans to better qualified borrowers. Then the relaxed standards spread to the wider mortgage market . . .”), and Stan Liebowitz, *The Real Scandal: How Feds Invited the Mortgage Mess*, *N.Y. Post* (Feb. 5, 2008, 2:39 AM), http://www.nypost.com/p/news/opinion/opedcolumnists/item_Qjl08vDbysbe6LWDxcq03jjsessionid=C10C51D2E92830A5E4DB16A20D368628 (on file with the *Columbia Law Review*) (opining that “it was the regulators who relaxed [underwriting] standards—at the behest of community groups and ‘progressive’ political forces”), with Adam J. Levitin & Susan Wachter, *Explaining the Housing Bubble*, 100 *Geo. L.J.* (forthcoming 2012) (manuscript at 40), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1669401 (on file with the *Columbia Law Review*) (“Claims about the CRA’s role in the bubble have been thoroughly considered elsewhere and largely debunked . . .”), and Raymond H. Brescia, *Part of the Disease or Part of the Cure: The Financial Crisis and the Community Reinvestment Act*, 60 *S.C. L. Rev.* 617, 619 (2009) (contending that “instead of causing the subprime mortgage crisis, the CRA simply failed to prevent the crisis”).

192. Greve, *supra* note 189, at 390 n.206 (citing Catherine Yang, *The ‘Blackmail’ Making Banks Better Neighbors*, *Bus. Wk.*, Aug. 15, 1988, at 101).

193. See D. Rosenberg & S. Shavell, *A Model in Which Suits Are Brought for Their Nuisance Value*, 5 *Int’l Rev. L. & Econ.* 3, 3 (1985) (defining nuisance suit as “suit in which the plaintiff is able to obtain a positive settlement from the defendant even though the defendant knows the plaintiff’s case is sufficiently weak that he would be unwilling or unlikely actually to pursue his case to trial”).

small relative to the expected litigation costs.”¹⁹⁴ Yet, as Bebbchuck explains, “the negative expected value of litigation might not deter the plaintiff from suing: the plaintiff might sue—hoping to extract a settlement offer from the defendant, and planning to drop the case if such an offer is not received.”¹⁹⁵

The primary legal mechanism in the federal courts for deterring frivolous suits and other actions brought for their “nuisance value” is Rule 11 of the Federal Rules of Civil Procedure.¹⁹⁶ For this reason, one commentator has drawn an analogy between Rule 11 and the spite fence statutes discussed above.¹⁹⁷ “What does [Rule 11] have in common with rules of nuisance-abatement that apply to spite fences? The rule is designed to deter vexatious and frivolous legal actions . . . that are brought for purposes other than to obtain the relief sought in the pleading, motion, or other demand for relief.”¹⁹⁸ Of course, as commentators have noted, Rule 11 is underinclusive in deterring negative expected value suits, at least in part because of the difficulty of distinguishing colorable claims from suits brought for their nuisance value.¹⁹⁹

Negative expected value suits are common in state and probate courts as well as federal courts. For example, in the field of trusts and estates, disinherited children and others who are dissatisfied with their share of an estate may launch will contests. Contestants may initiate litigation because they realize that, by increasing costs through delays, negative publicity, and litigation expenses, they may be able to extract a settlement

194. Lucian Arye Bebchuk, *Suing Solely to Extract a Settlement Offer*, 17 J. Legal Stud. 437, 437 (1988).

195. *Id.* Strategic Lawsuits Against Public Participation (SLAPPs) are another type of opportunistic litigation because “while SLAPP suits ‘masquerade as ordinary lawsuits’” SLAPPs “are generally meritless suits brought by large private interests to deter common citizens from exercising their political or legal rights or to punish them for doing so.” *Wilcox v. Superior Court*, 33 Cal. Rptr. 2d 446, 450 (Ct. App. 1994). In an attempt to deter such suits, a majority of states have enacted anti-SLAPP statutes. See Carson Hilary Barylak, Note, *Reducing Uncertainty in Anti-SLAPP Protection*, 71 Ohio St. L.J. 845, 847 (2010) (“[T]wenty-seven states and one territory have passed anti-SLAPP statutes.”).

196. Rule 11 permits a federal court to sanction any attorney, law firm, or party for violating a provision that requires “an attorney or unrepresented party [to] certif[y] that to the best of the person’s knowledge, information, and belief, formed after an inquiry reasonable under the circumstances” that a pleading, written motion, or other paper “is not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation.” Fed. R. Civ. P. 11.

197. See *supra* Part II.A.3.

198. Joseph M. Perillo, *Abuse of Rights: A Pervasive Legal Concept*, 27 Pac. L.J. 37, 66 (1995).

199. See, e.g., Ronald J. Gilson, *The Devolution of the Legal Profession: A Demand Side Perspective*, 49 Md. L. Rev. 869, 908 (1990) (noting “Rule 11 standards will be intentionally underinclusive”).

from the estate.²⁰⁰ Consequently, as John Langbein notes, “the odor of the strike suit hangs heavily over this field.”²⁰¹

Strategic spillovers are present not only in litigation but also in the settlement process itself. For example, under Federal Rule of Civil Procedure 23(e)(5), any class member may object to the proposed settlement of a class action.²⁰² In many cases, however, “professional objectors” file objections to receive monetary payments in exchange for withdrawing their objections.²⁰³ In analyzing this possibility of “objector blackmail,” Brian Fitzpatrick explains that, even if a federal district court approves a class action settlement, class members who filed objections with the district court can appeal the court’s approval.²⁰⁴ An appeal not only delays the resolution of the settlement, but “it also delays the point at which class counsel can receive their fee awards, which are contingent upon the settlement.”²⁰⁵ Eager to obtain these fee awards, class counsel “are willing to pay objectors out of their own pockets to drop the appeals.”²⁰⁶ Consequently, as Fitzpatrick describes, class members may file “wholly frivolous objections and appeals for no other reason than to induce these side payments from class counsel.”²⁰⁷

200. John H. Langbein, *Living Probate: The Conservatorship Model*, 77 Mich. L. Rev. 63, 66 (1978) (stating most litigation over testator’s capacity “is directed towards provoking pretrial settlements, typically for a fraction of what the contestants would be entitled to receive if they were to defeat the will”); see also Edmond Nathaniel Cahn, *Undue Influence and Captation: A Comparative Study*, 8 Tul. L. Rev. 507, 518 (1934) (“The delays in probate occasioned by groundless contests often result in depreciation, waste or complete disappearance of valuable assets of the estate. Contestants have nothing to lose—the ‘nuisance value’ of delay and the abhorrence of respectable persons for publicity may result in a settlement.”).

201. Langbein, *supra* note 200, at 66; see also Jesse Dukeminier, Robert H. Sitkoff & James Lindgren, *Wills, Trusts, and Estates* 198–99, 203–07, 519–21 (8th ed. 2009) (discussing defensive measures, including “no-contest clauses,” that testators and their attorneys use to avoid will contests and incentives for settlements with disinherited children).

202. Fed. R. Civ. P. 23(e)(5).

203. See generally 4 Alba Conte & Herbert B. Newberg, *Newberg on Class Actions* § 11.55, at 168–69 (4th ed. 2002) (noting that “objecting has become big business” but that courts must carefully review objectors as some objections are “‘obviously ‘canned’ objections filed by professional objectors who seek out class actions to simply extract a fee by lodging generic, unhelpful protests’” (quoting *Shaw v. Toshiba Am. Info. Sys., Inc.*, 91 F. Supp. 2d 942, 973 (E.D. Tex. 2000))); Edward Brunet, *Class Action Objectors: Extortionist Free Riders or Fairness Guarantors*, 2003 U. Chi. Legal F. 403, 429 (“Commentators have characterized the fees paid to class action objecting attorneys as ‘an extortion game’ and have described the objector’s tactics as identifying a class action settlement, arguing against it, and ‘go[ing] away’ in exchange for ‘some payment of attorneys’ fees.’”).

204. Brian T. Fitzpatrick, *The End of Objector Blackmail?*, 62 Vand. L. Rev. 1623, 1624 (2009).

205. *Id.*

206. *Id.*

207. *Id.*

The concern about objector blackmail in class action settlements has a structure similar to the problem of strategic spillovers. Certain class members may not have any incentive to object to a settlement. However, knowing they can impose costs on class counsel, in the form of a delay in receiving their fee awards, these class members may object opportunistically to extract a payment in exchange for ceasing their objections.²⁰⁸

Of course, various types of activities that also might be characterized as strategic spillovers arise in many other areas of the law as well.²⁰⁹ The examples of strategic spillovers discussed above are thus not intended to be a comprehensive list but merely illustrations of a problem that appears in different forms throughout the law.

III. THE HARM OF STRATEGIC SPILLOVERS

Before examining a number of potential solutions for mitigating the harm from strategic spillovers, it is necessary to identify the underlying problem more precisely. In a 1975 article in the *American Economic Review*,

208. See Bruce Hay & David Rosenberg, “Sweetheart” and “Blackmail” Settlements in Class Actions: Reality and Remedy, 75 Notre Dame L. Rev. 1377, 1401 n.45 (2000) (noting that “non-class counsel [who] file or threaten objections to the class settlement for the purpose of forcing a side-settlement with class counsel” may be engaging in the socially detrimental practice of “extracting nuisance-value settlements”); William B. Rubenstein, The Fairness Hearing: Adversarial and Regulatory Approaches, 53 UCLA L. Rev. 1435, 1459 (2006) (concluding “track record of professional objectors to date . . . has been less than stellar” and “[t]his part of the profession has arguably attracted lawyers more interested in coercing a fee than in correcting a wrong”).

209. Competition law is another area that seems worthy of exploration. Several early property law cases, which involve situations similar to the strategic spillovers discussed above, raise fundamental issues regarding what distinguishes “fair” versus “unfair” competition and under what circumstances a party may be liable for harming a competitor. See, e.g., *Tuttle v. Buck*, 119 N.W. 946, 948 (Minn. 1909) (“[W]hen a man starts an opposition place of business . . . for the sole purpose of driving his competitor out of business . . . he is guilty of a wanton wrong and an actionable tort.”); *Keeble v. Hickeringill*, (1707) 103 Eng. Rep. 1127 (Q.B.) 1128; 11 East 574 (holding plaintiff has cause of action against defendant who had fired gun near plaintiff’s duck decoy to deprive plaintiff of profit by frightening away wildfowl, even though defendant may not have been liable if he had lured wildfowl into his own decoy, because “where a violent or malicious act is done to a man’s occupation, profession, or way of getting a livelihood[,] there an action lies in all cases[.] [b]ut if a man doth him damage by using the same employment . . . , no action would lie”). Similarly vexing issues concerning the line between fair and unfair competition arise today in a number of contexts including intentional or tortious interference with business relationships or contractual relations, see Harvey S. Perlman, *Interference with Contract and Other Economic Expectancies: A Clash of Tort and Contract Doctrine*, 49 U. Chi. L. Rev. 61, 61 (1982) (discussing fact that “courts impose liability under the rubric of the interference tort in a variety of contexts, but they have failed to develop common or consistent doctrines”), and intellectual property, see, for example, *Monsanto Canada, Inc. v. Schmeiser*, [2004] 1 S.C.R. 902, 904 (Can.) (holding farmer infringed chemical company’s patent even though he had never purchased or deliberately planted genetically modified seeds), as well as antitrust law, see Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 Am. Econ. Rev. 267, 267 (1983) (discussing how “firm can induce its rivals to exit the industry by raising their costs”).

economists George Daly and J. Fred Giertz discussed the connection between externalities and extortion.²¹⁰ Daly and Giertz argued that, in addition to the obvious distributive effects, using externalities to engage in "extortion" is socially undesirable because bargaining to resolve such externalities entails transaction costs.²¹¹

However, the misallocation of resources that can occur as a result of strategic spillovers is not merely, or even primarily, a matter of needless transaction costs. Strategic spillovers create three additional problems, each of which is potentially more significant than the costs of bargaining. First, strategic parties may engage in socially wasteful actions to establish the credibility of threats to engage in strategic spillovers. Second, strategic parties may undertake socially wasteful actions because, in certain situations, it is infeasible for such parties to bargain with potential victims *ex ante*. Third, potential victims, realizing that strategic parties may engage or threaten to engage in such externality-generating activities, may undertake various types of socially wasteful precautions. After briefly discussing transaction costs, this section analyzes each of these problems in turn.

A. Transaction Costs Incurred While Bargaining

Strategic spillovers have a distributive effect to the extent that an opportunistic party is able to extract a payment from potential victims. For example, by threatening to construct a livery stable, a strategic landowner may be able to extract a significant payment from his neighbors.²¹² By continuing to emit excess pollution, an opportunistic firm may be able to obtain a substantial subsidy from the government.²¹³ Or, by threatening to deregulate a regulated industry, a legislator may be able to acquire additional campaign contributions from industry members.²¹⁴ As Daly and Giertz noted, using externalities to extract payments from others can "result in profound changes in the distribution of income."²¹⁵

Yet Daly and Giertz point out that using externalities to extract payments may have an allocative (or welfare) effect, as well as a distributive effect.²¹⁶ The reason for this welfare effect, they assert, is that, in bargaining to resolve such externalities, parties incur transaction costs.²¹⁷ For example, if a strategic landowner and the landowner's neighbors bargain over a payment to ensure the landowner will not build a livery stable, the

210. Daly & Giertz, Externalities, *supra* note 7.

211. *Id.* at 1001.

212. See *supra* Part II.A.1.

213. See *supra* Part II.B.

214. See *supra* Part II.E.

215. Daly & Giertz, Externalities, *supra* note 7, at 1001.

216. *Id.* at 999 ("While extortion redistributes wealth and is sometimes condemned on the basis of equity, there also seem to be important allocative reasons for its disfavor as well . . .").

217. *Id.* at 999–1000 (describing how allocative reasons for disfavoring extortion through externalities "relate to the costliness of the bargaining process").

costs of bargaining are social costs incurred for no productive purpose.²¹⁸ Similarly, if an opportunistic firm lobbies for a carbon subsidy and the government grants the subsidy, the costs of lobbying for and administering the subsidy are costs incurred for no productive purpose. Likewise, if a legislator collects campaign contributions to ensure a bill will be defeated, even though the legislator would have voted against the bill anyway, the costs of soliciting and making the contributions are costs incurred for no productive purpose. Thus, according to the conventional wisdom, allowing parties to extract payments by engaging in extortion through externalities may have not only a distributive effect (because of payments from potential victims to strategic parties) but also a welfare effect (because of the transaction costs that accompany bargaining for such payments).²¹⁹

B. *Investments to Establish the Credibility of Threats*

The conclusion that transaction costs are the primary problem with parties attempting to extract payments using externalities is premised on a simplifying (yet, ultimately, unwarranted) assumption. The assumption is that threatening to engage in an activity that entails a negative externality is equivalent to engaging, or preparing to engage, in the activity itself. Ronald Coase, for example, remarks: "Of course, it would not be necessary actually to plant the crops or increase the herd before agreeing not to do so. All that need be done would be to threaten to take such actions"²²⁰ Likewise, Stewart Sterk notes that it may be unnecessary for a landowner to construct a spite fence because the "mere threat of building the fence is likely to induce his neighbor to pay money to be free of the fence, at least so long as the neighbor knows that no legal (or equitable) remedy is available."²²¹

However, if a strategic party is merely issuing a threat that the party intends to undertake an externality-generating activity, potential victims may be unwilling to pay the strategic party to refrain from engaging in the activity. For example, it is unlikely that a Chicago resident would have transferred money to a stranger who, after announcing plans to operate a

218. See *id.* at 1000 ("With any positive level of bargaining costs, extortion will clearly lead to a reduction of social welfare since scarce resources are utilized in the process of negotiation while failing to improve the allocation of resources."); see also Fennell, *Adjusting Alienability*, *supra* note 38, at 1424 ("Scholars analyzing phenomena like blackmail and cybersquatting have correctly homed in on the worthlessness of the underlying acquisition activity.").

219. See George Daly & J. Fred Giertz, *Externalities, Extortion, and Efficiency: Reply*, 68 *Am. Econ. Rev.* 736, 736 (1978) ("In a world of zero transactions cost, extortion would merely redistribute resources; in a world of costly transactions it would result in resources being used in the bargaining process with no resulting allocative gains").

220. Coase, *Blackmail*, *supra* note 66, at 657; see also *supra* notes 62–65 and accompanying text (highlighting Coase's discussion of strategic farmer and cattle-raiser).

221. Sterk, *supra* note 95, at 84; see also *supra* notes 96–99 and accompanying text (discussing use of "spite fences" to extract payment).

livery stable in the neighborhood, demanded a payment in exchange for agreeing not to operate the stable. In the absence of some credible evidence that the stranger intended to operate the stable, the landowner might have dismissed the threat as "cheap talk."²²²

Social costs begin to arise because a strategic party might attempt to make his or her threat credible by incurring some costs. Incurring costs provides an informational signal to potential victims because it allows threateners to distinguish themselves from other parties for whom it would not be worthwhile to carry out the threat. For example, in commenting on Coase's ranchers, Harold Demsetz points out that "[t]he acquisition of a larger sum by the owner of ranchland generally will require him to incur some cost to make his threat credible, perhaps by actually beginning to increase herd size beyond normal levels."²²³ Similarly, to convince neighboring landowners that the threat to open a livery stable was credible, a strategic party might have had to incur some costs such as ordering equipment for operating the stable or beginning to construct the stable itself. At the very least, neighboring landowners might want to know whether the party had purchased the land for the livery stable. These steps antecedent to engaging in an activity—purchasing land, ordering equipment, and beginning construction—entail investments that, in the absence of the externality, the strategic party would not have incurred and that, therefore, are socially wasteful.²²⁴

Moreover, a strategic party may have to begin undertaking the activity to demonstrate to potential victims that they would in fact suffer harm or to show the extent to which they would suffer harm. An individual engaging in the livery stable scam in Chicago may have had to begin operating the stable before neighbors realized the extent of the harm. (Hearing about the possibility of horse manure has a potentially different effect than having to smell the manure itself.) Furthermore, in some circumstances, the strategic party may prefer to wait until the activity is in

222. A cheap-talk threat is a threat that is costless to make and, as a result, is often considered to be not credible. For a relatively accessible introduction to cheap-talk games, see Robert Gibbons, *Game Theory for Applied Economists* 210–18 (1992). On the concept of "cheap talk" in economics, see generally Vijay Krishna & John Morgan, *Cheap Talk*, in 1 *The New Palgrave Dictionary of Economics*, supra note 24, at 751. A number of articles suggest that cheap talk can affect bargaining under certain conditions. See generally Joseph Farrell & Matthew Rabin, *Cheap Talk*, 10 *J. Econ. Persp.* 103 (1996); Joseph Farrell & Robert Gibbons, *Cheap Talk Can Matter in Bargaining*, 48 *J. Econ. Theory* 221 (1989); Steven Matthews & Andrew Postlewaite, *Pre-Play Communication in Two-Person Sealed-Bid Auctions*, 48 *J. Econ. Theory* 245 (1989).

223. Harold Demsetz, *When Does the Rule of Liability Matter?*, 1 *J. Legal Stud.* 13, 23–24 (1972) [hereinafter Demsetz, *Rule of Liability*].

224. A party's incurring such costs for the purpose of increasing the credibility of a threat to engage in the externality-generating activity is a social loss because otherwise the party could have put these resources to a productive use. See supra note 37 and accompanying text; see also Shoup, supra note 7, at 310–11 (noting "a pollution entrepreneur might actually have to invest resources, and he might have to pollute, solely to make his threats credible, a clear social loss").

progress before attempting to extract a payment. Attempting to bargain with victims after the externality is already occurring might arouse less suspicion that the spillover is strategic than demanding payments from potential victims before the fact.²²⁵

Social costs also may arise if a strategic party is concerned about the credibility of *future* threats. Suppose a strategic party threatens to engage in an externality-generating activity, but the party is unsuccessful in extracting a payment because bargaining fails. In this circumstance, the party normally would have an incentive not to engage in the activity as the private costs of doing so exceed the private benefits. However, if the party is concerned about the credibility of future threats, the party may still undertake, rather than just threaten to undertake, the activity, thereby imposing social costs.²²⁶

Thus, even if contracting between strategic parties and potential victims is possible *ex ante*, strategic parties may make investments and expend resources to establish the credibility of their threats. Yet these investments and resources are costly. And costly expenditures that are incurred to game the system are socially wasteful because parties would not have incurred such costs in the absence of the possibility of extracting a payment.

C. *Decisions Made if Ex Ante Bargaining Is Infeasible*

Strategic spillovers are also problematic because, even if bargaining were costless and all threats were credible,²²⁷ it is sometimes infeasible for parties that are planning to engage in externality-generating activities to bargain with potential victims of their activities before the fact. In certain circumstances involving opportunistic behavior, the primary concern is the possibility that *ex post* opportunism will cause parties to incur additional costs *ex ante*. In the contractual holdup literature, for example, the concern is that parties may attempt to renegotiate a contract as a result of a change in circumstances.²²⁸ Because contracting parties anticipate the possibility of renegotiation, they may initially invest effort to

225. Cf. Fennell, *Adjusting Alienability*, *supra* note 38, at 1454 (suggesting “we might view an interest in selling the entitlement as evidentiary on the question of intent” (citing Berman, *supra* note 98)).

226. Cf. Ginsburg & Shechtman, *supra* note 96, at 1876 (positing that blackmailer may intentionally exploit information “in order either to get immediate payment or, failing that, to invest in credibility for the next time”).

227. But cf. *supra* Part III.A (discussing transaction costs); Part III.B (discussing credibility of threats).

228. On the problem of contractual holdup and renegotiation of contracts, see generally Aaron S. Edlin & Benjamin E. Hermalin, *Contract Renegotiation and Options in Agency Problems*, 16 J.L. Econ. & Org. 395 (2000); Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 *Econometrica* 755 (1988); Steven Shavell, *Contractual Holdup and Legal Intervention*, 36 J. Legal Stud. 325 (2007).

structure their contracts to minimize the likelihood of holdup, or they may forgo the contractual relationship altogether.²²⁹

But, for certain strategic spillovers, this possibility of negotiating *ex ante* is infeasible. As noted above, a firm planning to construct a new factory, quarry, or other facility that entails harmful spillovers may have an incentive to build its facility in a suboptimal location that is more likely to conflict with future development.²³⁰ The firm anticipates that, if a conflict does arise, it may be able to bargain with the future developer or homeowners and extract a payment, e.g., a higher sales price.²³¹

However, the firm that is deciding where to locate its facility may be unable to bargain with the future developer or homeowners that will incur the harm.²³² At the time of the firm's decision, neither the developer nor the homeowners are known. These parties may not decide whether to settle near the facility until years after the firm has chosen a site. Thus, the firm may build a facility in a socially undesirable location even though, if *ex ante* bargaining were feasible, it might have negotiated an agreement with potential victims.²³³ A social loss occurs because, even if bargaining is possible *ex post*, the firm already has chosen a suboptimal location for its facility. Thus, strategic spillovers also can result in a misallocation of resources in situations in which there is no opportunity for bargaining to occur before a party must decide whether (or where) to undertake an externality-generating activity.

D. *Precautions to Avoid Harmful Effects*

Strategic spillovers are problematic not only because opportunistic parties may undertake socially wasteful actions, either to establish the credibility of their threats or because *ex ante* bargaining is infeasible,²³⁴ but also because potential victims may undertake socially wasteful precautions. Knowing parties may engage in strategic spillovers, potential victims may attempt to lower their vulnerability to externality-generating activities.

In the general context of extortion or blackmail, Steven Shavell describes how "potential victims of threats will want to reduce their vulnerability to threateners" and can do so by "diminish[ing] the scale of the activities that expose them to risk" or "tak[ing] precautions to lower the

229. See Abraham L. Wickelgren, *The Limitations of Buyer-Option Contracts in Solving the Holdup Problem*, 23 J.L. Econ. & Org. 127, 127 (2007) ("Several articles have established conditions under which renegotiation will undermine the ability of any contract to create efficient incentives for *ex ante* investment . . .").

230. See *supra* Part II.A.2.

231. See *supra* Part II.A.2.

232. See *supra* Part II.A.2.

233. See *supra* Part II.A.2.

234. See *supra* Part III.B–C.

likelihood of threats given the scale of [an] activity.”²³⁵ The precautions taken by these victims are the same types of precautions that potential victims may undertake to avoid the effects of strategic spillovers. But the precautions to avoid strategic spillovers, like the precautions to avoid extortion and blackmail in general, reduce social welfare.²³⁶

For example, in anticipating the livery stable scam, a potential purchaser of real estate in Chicago may have decided not to buy a lot adjacent to an empty parcel of land. The purchaser might have feared that a strategic party could later buy the empty parcel and threaten to operate a livery stable there. The decision to forgo purchasing a particular parcel for this reason is socially undesirable. Because of the possibility of strategic behavior, the buyer may have purchased a different parcel that was less desirable or not purchased a parcel at all. Alternatively, existing owners, such as the affluent residents in San Francisco, might decide to buy a vacant parcel preemptively to avoid the risk that a strategic party will purchase the parcel and then threaten to engage in a nuisance-like activity like operating a brewery or bordello. The decision to buy the vacant parcel is also socially undesirable. The buyer is only choosing to purchase

235. Steven Shavell, *An Economic Analysis of Threats and Their Illegality: Blackmail, Extortion, and Robbery*, 141 U. Pa. L. Rev. 1877, 1879–80 (1993) [hereinafter Shavell, *Blackmail*]. For other economically oriented analyses of extortion and blackmail in the legal literature, see Berman, *supra* note 98, at 797–810 (using economic analysis to support “evidentiary theory” that blackmail is used primarily to reveal bad actor’s motives); Coase, *Blackmail*, *supra* note 66, at 658 (evaluating widespread disapproval of blackmail even though economically “there are no losers in an exchange”); Richard A. Epstein, *Blackmail, Inc.*, 50 U. Chi. L. Rev. 553, 554–55 (1983) (developing theory supporting criminalization of blackmail based on “interplay between normative and practical considerations”); Ginsburg & Shechtman, *supra* note 96, at 1850 (defending current state of blackmail law as “consistent with economic rationality”); Lindgren, *supra* note 48, at 672 (arguing “key to the wrongfulness of the blackmail transaction” is implicit involvement of third party); Richard A. Posner, *Blackmail, Privacy, and Freedom of Contract*, 141 U. Pa. L. Rev. 1817, 1818 (1993) (asserting “blackmail is, and should be, forbidden because, although ostensibly a voluntary transaction between consenting adults, it is likely to be, on average, wealth-reducing rather than wealth-maximizing”); Henry E. Smith, *The Harm in Blackmail*, 92 Nw. U. L. Rev. 861, 863 (1998) (arguing “the criminalization of blackmail is aimed at preventing . . . harms stemming from victim self-help”).

236. See Shavell, *Blackmail*, *supra* note 235, at 1894 (noting “precautions taken by potential victims avoiding threats reduce social welfare”). The costs of such precautions can be significant. As Nicole Garnett points out in the context of private investments to prevent crime:

Americans spend more on these private precautions—estimates range from \$160 billion to \$300 billion—than on the total U.S. law-enforcement budget. In other words, private individuals spend more to avoid being victimized than U.S. governments at all levels (federal, state, and local) spend on police, prosecutors, judges, and prisons. And these figures do not reflect the total cost of crime avoidance, such as the opportunity costs of remaining inside behind locked doors to avoid victimization.

Nicole Stelle Garnett, *Ordering the City: Land Use, Policing, and the Restoration of Urban America* 133 (2010) (citing Robert A. Mikos, “Eggshell” Victims, Private Precautions, and the Societal Benefits of Shifting Crime, 105 Mich. L. Rev. 307, 307 (2006)). To date, there are no estimates of the costs of precautions to avoid strategic spillovers.

the extra parcel as a precaution against the possibility of strategic behavior.

Strategic spillovers also reduce social welfare because individuals are often risk averse. Lawrence Blume and Daniel L. Rubinfeld point out that "[i]ndividuals would presumably be willing to pay something to insure against the prospect of a factory moving nearby and imposing substantial externalities."²³⁷ But parties may be willing to insure against the possibility of an externality regardless of whether the harm arises unintentionally as the incidental byproduct of a conventional externality or purposely as the result of a strategic spillover. Thus, if potential victims are risk-averse and if they had some way to insure against the possibility of strategic spillovers, they presumably would avail themselves of the opportunity.

Overall, the precautions undertaken by potential victims, like the investments undertaken by opportunistic parties, are socially undesirable. Potential victims would not have undertaken these precautions, and opportunistic parties would not have undertaken such investments, but for the possibility that the opportunistic parties might attempt to extract payments by means of strategic spillovers.²³⁸ As one commentator explains, "[t]he wealth transfer [from victim to opportunist] is significant not because of its mere existence, but because the transferring act itself does not produce a beneficial product nor promote the productive goal of the contract; yet both perpetrating and protecting against such a transfer are costly."²³⁹

IV. SOLUTIONS FOR STRATEGIC SPILLOVERS

Given the ubiquity of strategic spillovers,²⁴⁰ and the social harm that such spillovers may create,²⁴¹ here is the challenge: How, if at all, can the legal system attempt to differentiate conventional externalities and strategic spillovers and thus eliminate, or at least mitigate, the harm arising from the opportunistic use of externalities? To begin to address this question, this section examines (A) a number of the traditional mechanisms for resolving externalities; (B) several innovative approaches for targeting opportunism; and (C) a few of the nonlegal limitations that minimize strategic spillovers.

237. Lawrence Blume & Daniel L. Rubinfeld, *Compensation for Takings: An Economic Analysis*, 72 *Calif. L. Rev.* 569, 592 (1984).

238. See *supra* notes 34–37 and accompanying text (discussing why strategic spillovers are socially undesirable, regardless of whether opportunistic party engages in externality-generating activity or merely threatens to do so).

239. Timothy J. Muris, *Opportunistic Behavior and the Law of Contracts*, 65 *Minn. L. Rev.* 521, 526 (1981).

240. See *supra* Part II.

241. See *supra* Part III.

A. Traditional Mechanisms for Resolving Externalities

This section begins to explore potential strategies for mitigating the harm of strategic spillovers by first analyzing four of the traditional mechanisms for resolving conventional externalities: (1) Coasean bargaining; (2) public subsidies; (3) regulatory prohibitions; and (4) liability rules or corrective taxes.

1. *Coasean Bargaining*. — Bargaining can be an effective way to resolve externalities, at least if transaction costs are relatively low.²⁴² Coase emphasizes “the possibility that externality problems would be cured by bargaining, and the consequent irrelevance of the law to substantive outcomes, when parties can bargain with little cost.”²⁴³ However, bargaining is relatively ineffective for controlling strategic spillovers.²⁴⁴ Relying on bargaining is problematic, regardless of the magnitude of negotiating costs (at least in the absence of perfect information),²⁴⁵ because it allows a strategic party to engage in the very activity, namely, bargaining, that is necessary to extract payments from potential victims.²⁴⁶

To see why bargaining is suboptimal, consider again the livery stable scam. Suppose Owner Z is an opportunistic individual in Chicago who is considering whether to operate a livery stable to extract payments from the owners of neighboring parcels. If Z decides to operate a stable, he would obtain a private benefit of 8 at a private cost of 10. In addition, operating a livery stable involves an external cost of 5 on the neighbors. Thus, by operating a livery stable, Z creates a social loss of 7 (i.e., $-2 - 5$). It is better, therefore, for Z not to operate a livery stable.

Under the conventional wisdom regarding externalities, Z would not have an incentive to operate a stable because Z's private benefit, 8, is less than his private cost, 10.²⁴⁷ The problem is that, when the possibility of opportunistic behavior is considered, Z may have an incentive to operate a stable. Although Z's private cost, 10, outweighs his private benefit, 8, Z may engage in the activity to impose harm, 5, on his neighbors. By doing so, Z is then able to bargain for a payment—suppose the neighbors agree to pay 4 to Z—in exchange for Z agreeing to cease his activity. Assuming bargaining costs are 0, Z may decide to operate the stable—the socially undesirable outcome—because his private benefit of 12 (i.e., $8 + 4$) outweighs his private cost of 10.

242. See generally Coase, *Social Cost*, *supra* note 1 (emphasizing role of transaction costs as barrier to efficient allocation of resources).

243. Shavell, *Foundations*, *supra* note 6, at 109 (citing Coase, *Social Cost*, *supra* note 1).

244. See *supra* Part I.C.

245. See *supra* note 56 (discussing debate among economists on necessity of perfect information for Coase Theorem).

246. See Daly & Giertz, *Externalities*, *supra* note 7, at 997 (“Critics have noted that the reliance on private bargaining to control the creation of externally harmful activities may well have the adverse effect of encouraging the very phenomena it seeks to control.”).

247. See *supra* note 55 and accompanying text.

Instead of operating a livery stable, Z could just threaten to do so. However, without incurring any costs to make the threat credible, such a threat is merely cheap talk.²⁴⁸ The neighbors might not pay unless Z incurred some cost to make his threat credible. Suppose, for example, that Z could purchase the equipment necessary to make his threat credible at a cost of 1. Under these circumstances, Z might incur this cost as the benefit of extracting a payment through a credible threat, 4, is greater than the cost of making the threat credible, 1. However, the result is, once again, socially undesirable because Z's investment in this equipment, -1, is a social loss. The social loss occurs because of the misallocation of resources: Z would not have purchased the equipment but for the possibility of extracting a payment.²⁴⁹ Thus, relying on bargaining to resolve strategic spillovers may result in an undesirable outcome, regardless of whether the strategic party engages in the activity or merely threatens to do so.²⁵⁰

Moreover, the fact that a party may seek to bargain with others, either before or after undertaking an externality-generating activity, does not necessarily mean the party is acting opportunistically. As noted above, some commentators have suggested that an attempt to negotiate might itself provide evidence of a strategic or bad faith motivation.²⁵¹ However, it may be optimal for parties to engage in bargaining, including bargaining *ex ante*, to resolve conventional externalities.²⁵² Thus, bargaining usually cannot distinguish self-interest from opportunism.

Finally, it is worth noting that, even if a strategic party and potential victims are capable of resolving a strategic spillover through bargaining, it may not be feasible to prevent *subsequent* strategic spillovers. Clifford Holderness describes how bargaining is "futile" if there is an "open class" because assignment of liability will encourage entry into the class.²⁵³ Similarly, with strategic spillovers, a different strategic party may attempt to

248. On cheap talk, see *supra* note 222 and accompanying text.

249. See *supra* Part III.B.

250. See *supra* notes 36–37 and accompanying text. Bargaining to prevent the strategic imposition of harm may be possible in certain circumstances if potential victims can create a mechanism to distinguish self-interested from opportunistic behavior. For example, to circumvent strategic holdouts in the context of assembling multiple parcels of land, a party may utilize "secret buying agents" and assemble the land without disclosing the identity of the assembler or the nature of the assembly. See generally Daniel B. Kelly, The "Public Use" Requirement in Eminent Domain Law: A Rationale Based on Secret Purchases and Private Influence, 92 Cornell L. Rev. 1 (2006) [hereinafter Kelly, Public Use]. In this way, buying agents can provide "an effective mechanism for distinguishing between those owners who are refusing to sell for opportunistic reasons and those owners who are refusing to sell because the price is too low." *Id.* at 24.

251. See *supra* note 225.

252. See *supra* Part I.C (illustrating ability of parties to resolve conventional externalities through bargaining).

253. Holderness, *supra* note 49, at 185–88.

extract payments from the same victims or the same strategic party may attempt to extract payments from different victims.²⁵⁴

2. *Public Subsidies.* — Public subsidies, which are often invoked as a solution for encouraging activities that involve positive externalities,²⁵⁵ are also a tool for discouraging activities that entail negative externalities.²⁵⁶ Specifically, the government may choose to pay a party that is causing a negative externality an amount “equal to the reduction in expected harm from some benchmark level that the party accomplishes.”²⁵⁷ However, like bargaining, this type of subsidy is relatively ineffective for resolving strategic spillovers. Indeed, like bargaining, a subsidy may create a perverse incentive for an opportunistic party to engage in an activity the party otherwise would not have undertaken.

To see why a subsidy is ineffective, return to the numerical example involving the livery stable scam described above.²⁵⁸ Suppose the government decided to pay livery stable owners for a reduction in expected harm. In this case, the government might pay 5 to Owner Z, if Z reduces the harm on neighbors to 0 from the baseline of 5, either by modifying its activity to limit the harm or by refraining from the activity itself. Anticipating that the government will subsidize this reduction, Z, who ordinarily would not have an incentive to operate a livery stable (because Z’s private benefit, 8, is less than his private cost, 10), might open a livery stable and then close the livery stable in exchange for receiving a subsidy of 5. Here, because the benefit of obtaining the subsidy, 5, exceeds the cost of creating and eliminating the social harm, -2, Z has the same incentive as the “pollution entrepreneurs” in China who are engaging in excess

254. For an example of a case illustrating this potential for subsequent strategic spillovers, see *Lewis v. Gollner*, 14 N.Y.S. 362, 363 (City Ct.), rev’d, 29 N.E. 81 (N.Y. 1891), in which a property owner “threatened to erect flats” and extracted a payment from neighbors “who thought their homes would be injured” and then, having “closed his bargain,” purchased a plot on the opposite side of the street, initiated construction of flats, and “negotiate[d] with the immediate neighbors of the new purchase, asking a large advance on his purchase price.” *Id.*; cf. Scott Altman, *A Patchwork Theory of Blackmail*, 141 U. Pa. L. Rev. 1639, 1648 (1993) (“Market-price-only blackmail is hard to detect because there cannot be any guarantee that a first payment will not be followed by more demands.”); Paul H. Robinson, Michael T. Cahill & Daniel M. Bartels, *Competing Theories of Blackmail: An Empirical Research Critique of Criminal Law Theory*, 89 Tex. L. Rev. 291, 299 (2010) (noting blackmail “may involve not just one demand of money for silence but repeated demands because the blackmailer . . . can continue to extract money or other value from the threatened party”).

255. See, e.g., Lily L. Batchelder, Fred T. Goldberg, Jr. & Peter R. Orszag, *Efficiency and Tax Incentives: The Case for Refundable Tax Credits*, 59 Stan. L. Rev. 23, 44 (2006) (“Pigouvian subsidies correct for positive externalities by subsidizing the desired behavior so that the market price reflects the social value of the good, which is defined as its private value to consumers plus the value of the positive externalities it generates.”).

256. See, e.g., Shavell, *Foundations*, supra note 6, at 94 (discussing use of subsidies to address harmful externalities).

257. *Id.*

258. See supra Part IV.A.1.

production to generate additional HFC-23 in order to cash in on carbon credits.²⁵⁹

3. *Regulatory Prohibitions.* — Another potential solution is directly prohibiting certain activities through regulation. Under regulation, the government attempts to “constrain[] the set of acts that would otherwise be permissible to commit given one’s property rights, so as to optimally resolve an external effect.”²⁶⁰ Although it is one of the “preeminent tools” that society uses for controlling conventional externalities,²⁶¹ regulation might be ineffective for resolving strategic spillovers because it may be overinclusive.

Suppose that, in addition to Owner Z, there are three other individuals in Chicago, Owners A, B, and C, each of whom is considering establishing a livery stable. Unlike Owner Z, Owners A, B, and C have served as apprentices at other livery stables and are true equine experts. If A, B, and C each decide to operate a stable, each owner would obtain a private benefit of 17 at a private cost of 10, for a profit of 7. Once again, if Z decided to operate a stable, he would obtain a private benefit of 8 and have a private cost of 10. In addition, operating a livery stable involves an external cost of 5 on the stable’s neighbors. Thus, by operating a livery stable, A, B, and C each create a social benefit of 2 (i.e., $7 - 5$), and Z creates a social loss of 7 (i.e., $-2 - 5$). As Table 2 illustrates, the socially desirable outcome is for A, B, and C to operate a livery stable and for Z not to operate a livery stable.

259. See *supra* Part II.B. Similarly, Howard Chang has argued that, “[u]nder conditions of asymmetric information, countries may seek to convince others that they bear large costs from pollution abatement by engaging in a great deal of pollution, so that other countries will offer larger ‘carrots’ to induce abatement.” Howard F. Chang, Carrots, Sticks, and International Externalities, 17 *Int’l Rev. L. & Econ.* 309, 310 (1997). Chang concludes that “‘carrots’ encourage greater environmental harm pending a multilateral agreement” and that, therefore, “a regime that is less hostile to ‘sticks’ may be more efficient in dealing with international externalities.” *Id.*; see also Howard F. Chang, An Economic Analysis of Trade Measures to Protect the Global Environment, 83 *Geo. L.J.* 2131, 2154–59 (1995) (discussing how subsidies and other carrots may create perverse incentives for countries to pollute); cf. Jonathan Remy Nash, Allocation and Uncertainty: Strategic Responses to Environmental Grandfathering, 36 *Ecology L.Q.* 809, 846 (2009) (noting that “program that distributes permits to individual societal actors based on current activities creates an incentive for those actors to increase their activities in anticipation of the regulation—and thus to worsen global climate change—in order to obtain more permits”).

260. Shavell, Foundations, *supra* note 6, at 93.

261. *Id.* at 101.

TABLE 2:
THE "LIVERY STABLE SCAM"

Owner	Private Benefit	Private Cost	External Cost	Social Welfare
A	17	10	5	2
B	17	10	5	2
C	17	10	5	2
Z	8	10	5	-7

Under the conventional wisdom, only A, B, and C would choose to operate a stable because only these three owners obtain a private benefit, 17, that exceeds their private cost, 10. Z would not have an incentive to operate a stable because Z's private benefit, 8, is less than his private cost, 10. If A, B, and C operate livery stables, social welfare is 6 (i.e., $2 + 2 + 2$), the socially desirable outcome. However, the conventional wisdom ignores the fact that Z may have an incentive to operate or threaten to operate a stable in order to extract a payment. As discussed above, relying on bargaining or subsidies to resolve this type of strategic spillover leads to an undesirable outcome because parties like Z hope to bargain with potential victims or to obtain a subsidy in exchange for reducing or eliminating the social harm of their activities.²⁶²

But what if the city enacted a regulation prohibiting livery stables in all residential areas? Enacting this regulation would result in a higher level of social welfare than relying exclusively on bargaining or subsidies. If A, B, C, and Z were each prohibited from operating a livery stable, then social welfare would be 0 because, with no livery stable operations, there would not be any costs or any benefits. Here, a prohibition is better than permitting the activity and then allowing bargaining or providing subsidies to resolve harmful effects because 0, the outcome if livery stables are prohibited, is greater than -1, the outcome if all four owners operate stables. However, a prohibition is worse than the socially desirable outcome because 0 is less than 6. The prohibition on livery stables in residential areas prevents the opportunistic party, Z, from engaging in a strategic spillover. But the prohibition also prevents the nonopportunistic parties, A, B, and C, from engaging in activities that, although having harmful effects, are socially desirable because the social benefits exceed the social costs.²⁶³

262. See *supra* Part IV.A.1-2.

263. From the present perspective, not having any livery stables in residential areas seems like the optimal outcome. However, in the context of this example, the socially desirable outcome is for A, B, and C (but not Z) to operate livery stables in the residential neighborhood. The premise of the example is that there is a net social benefit if certain livery owners operate their stables in a residential area—perhaps because of quick access for residents to their horses—rather than forcing every livery owner to locate to a nonresidential area.

Thus, if policymakers are unable to identify opportunistic behavior, then regulatory prohibitions may be suboptimal. Unless there is a way to distinguish strategic spillovers from other externality-generating activities, such prohibitions might deter socially desirable, as well as socially undesirable, activities. Harold Demsetz, in discussing Coase's example of a rancher who might purchase additional cattle or a farmer who may cultivate additional land, reaches a similar conclusion: "Because it is difficult to sort desirable from undesirable increases in herd or crop size, there is a real danger of penalizing desirable increases in herd or crop size by mistake if such wealth transfers are treated as extortion."²⁶⁴

4. *Liability Rules or Corrective Taxes.* — Liability rules or corrective taxes seem to offer a promising solution for addressing strategic spillovers. Ideally, either liability rules or corrective taxes would force each party that is engaging in an externality-generating activity to internalize the external costs of its activities.²⁶⁵ If opportunistic parties were forced to internalize the costs of their externalities, these parties would have no incentive to engage in strategic spillovers. Rather than being able to extract payments from potential victims, such parties would have to compensate victims (under liability rules) or pay the government (under corrective taxes) for the harm they are imposing or expect to impose.

Moreover, unlike regulatory prohibitions, liability rules or corrective taxes would not eliminate the externality-generating activities that are socially desirable. On one hand, if an activity's private benefits still exceed its private costs (including liability costs or tax payments), a nonopportunistic party would continue to engage in the activity. On the other hand, if the activity's private benefits did not exceed its private costs (including liability costs or tax payments), the nonopportunistic party would cease the activity. Thus, if forced to internalize their external costs, all parties, both opportunistic parties and nonopportunistic ones, would have a private incentive that converges with the socially desirable outcome.

To see why an approach based on liability rules or corrective taxes might lead to the optimal result, consider once again the livery stable

264. Demsetz, *Rule of Liability*, *supra* note 223, at 25; see also Mohring & Boyd, *supra* note 79, at 349 (discussing how "under the bribery approach [for resolving congestion externalities], it could prove troublesome to separate genuine potential drivers from those who pretend to be such merely to obtain bribes").

265. On the internalization of externalities, see *supra* note 47. Of course, liability rules come in two major forms: strict liability and negligence. See Shavell, *Foundations*, *supra* note 6, at 93-94 (distinguishing strict liability and negligence). For the sake of simplicity, this Article only discusses a liability rule based on strict liability, in which a party imposing harm on another is liable for the harm regardless of the party's level of care. It is worth noting, however, that a rule based on negligence can result in an additional type of strategic spillover. Specifically, under a negligence rule, an opportunistic party that is using a reasonable level of care may increase (or threaten to increase) its activity level to impose additional harm on others in order to extract a payment even though the party otherwise might not have undertaken the higher activity level.

example. With liability rules, Owners A, B, C, and Z would each be required to compensate their neighbors for the external harm, 5, if they operated a livery stable. Under these conditions, A, B, and C would continue to operate their stables, even after being forced to internalize the external harm, because their private benefits, 17, is greater than their private costs including liability, 15 (i.e., $10 + 5$). Z, instead of being able to extract a payment of 4 from his neighbors, would be required to pay 5 to his neighbors to compensate them for the harm. If Z is unable to extract payments by imposing external harm, Z's private benefit, 8, would be less than either his private cost, 10, or his private cost including liability, 15 (i.e., $10 + 5$). As a result, Z would not have any incentive to operate the stable. Thus, under the liability rule approach, social welfare is 6, the socially desirable outcome, because A, B, and C would each operate a stable and Z would not operate a stable. The same result occurs if the owners are required to pay a corrective tax in the amount equal to expected harm.²⁶⁶

The existence of strategic spillovers seems to suggest that, all other things being equal, society should rely on liability rules or corrective taxes somewhat more frequently than would be the case if individuals and firms acted to further their self-interest or maximize their profits but did not act opportunistically.²⁶⁷ However, liability rules or corrective taxes are not a panacea for solving strategic spillovers, as the example above seems to suggest, for two major reasons. First, liability rules and corrective taxes may involve high litigation or administrative costs.²⁶⁸ Second, liability rules and corrective taxes also create informational problems for courts and regulators.²⁶⁹ Indeed, the reason that society does not rely on liability or taxes for resolving many types of harm (e.g., congestion externalities

266. With a corrective tax, A, B, C, and Z would each be required to pay the government for the expected harm to neighbors, 5, if they operated a livery stable. A, B, and C would continue to operate their stables, even after being forced to internalize these external costs, because their private benefit, 17, would be greater than their private cost including the corrective tax, 15 (i.e., $10 + 5$). Z, instead of being able to extract a payment of 4 from his neighbors, would be required to pay 5 to the government. If Z is unable to extract payments by imposing external costs, Z's private benefit, 8, would be less than either his private cost, 10, or his private cost including the corrective tax, 15 (i.e., $10 + 5$). As a result, Z would not have any incentive to operate the stable. Thus, as in the case of liability rules, under a corrective tax, social welfare is 6, the socially desirable outcome, because A, B, and C would each operate a stable and Z would not operate a stable.

267. It is unclear whether this theoretical conclusion suggests the need for an increased reliance on liability rules or corrective taxes in practice as there is little empirical evidence regarding whether or not such mechanisms are currently over- or under-utilized. See Shavell, *Foundations*, *supra* note 6, at 101, 109 (stating that regulation and liability rules are the "preeminent tools that society employs to control externalities" and that corrective taxes are "used rarely" but noting that "the comparative analysis of the various means of controlling externalities is relatively underdeveloped").

268. See *id.* at 98 ("Administrative costs are the costs borne by the state and the parties in connection with the use of a legal rule . . .").

269. See *id.* at 95 ("If the state does not have complete information . . . , it cannot determine with certainty whether or not an action such as polluting should take place.").

on most roads or certain types of external harm between neighbors) is the existence of litigation and administrative costs as well as informational problems.

Theoretically, liability rules might entail an “administrative cost advantage” over other mechanisms for resolving externalities because “the legal system becomes involved only if harm is done.”²⁷⁰ Similarly, corrective taxes might offer an administrative cost advantage because the government might apply such taxes at the time an individual or firm purchases a product.²⁷¹ But the nonuse of liability or taxes to combat conventional externalities in many situations suggests that litigation or administrative costs are sometimes prohibitively high. Furthermore, in order to separate strategic spillovers from other externalities, the legal system would have to impose liability equal to damages or levy a tax equal to expected harm on each party engaging in an externality-generating activity, regardless of whether or not the spillover was strategic. Thus, liability rules or a corrective tax would entail litigation or administrative costs for imposing liability not only on parties engaging in strategic spillovers, but also on parties engaging in nonopportunistic externalities.

A second potential disadvantage with relying on liability rules or corrective taxes to deter strategic spillovers involves informational problems. If a court or regulator lacks perfect information, liability may not equal damages or a tax may not equal expected harm. As a result, liability or taxes may result in overdeterrence of conventional externalities associated with socially desirable activities or underdeterrence of either conventional externalities or strategic spillovers. Moreover, as Mitch Polinsky has pointed out, if liability *exceeds* damages (or if a tax *exceeds* expected harm), parties planning to undertake externality-generating activities that are socially desirable, as well as parties attempting to engage in strategic spillovers, may threaten not to engage in the activity to extract a payment from those who would be overcompensated.²⁷² Conversely, if liability is *less* than actual damages (or a corrective tax is *less* than expected harm), nonopportunistic parties may not bargain strategically, but opportunistic parties would still have an incentive to engage in strategic spillovers.

Finally, it is worth noting that, although functionally similar in many respects, liability rules and corrective taxes do entail important differences. In a pair of recent articles, Steven Shavell discusses several of the key differences between liability and taxation for the optimal resolution

270. *Id.*

271. See *id.* (“[A]pplying corrective taxes can be inexpensive if, for instance, it is done at the time of the purchase of a product (a firm could be made to pay the tax when it buys fuel that generates pollution).”).

272. See generally A. Mitchell Polinsky, *An Introduction to Law and Economics* 22 (3d. ed. 2003) (discussing this type of strategic behavior in nuisance law example); see also Polinsky, *Resolving Nuisance*, *supra* note 84, at 1093–94 (noting “if liability ever exceeds actual damages, the parties have an incentive to bargain over (at least some of) the gains from trade and therefore may engage in strategic behavior”).

of harmful externalities.²⁷³ While there has been relatively little analysis of liability versus taxation,²⁷⁴ Shavell compares the relative merits of these tools by examining a number of factors including administrative costs, litigation costs, and informational problems.²⁷⁵ A systematic application of these factors to the various types of strategic spillovers discussed above is beyond the scope of this Article, but it is important to recognize that the differences between liability rules and corrective taxes are relevant not only for the optimal resolution of conventional externalities but also for any future analyses of strategic spillovers.²⁷⁶

B. *Alternative Approaches for Targeting Opportunism*

Because each of the traditional ways of resolving conventional externalities is imperfect for addressing strategic spillovers, this section considers four alternative approaches: (1) financial disclosures; (2) inalienability; (3) equity; and (4) abuse of right.

273. See Steven Shavell, *Corrective Taxation Versus Liability*, 101 *Am. Econ. Rev.* 273, 273 (2011) [hereinafter Shavell, *Corrective Taxation*] (comparing “corrective taxation to liability in two versions of a model, with a view toward shedding light on the difference in their application); Steven Shavell, *Corrective Taxation Versus Liability as Solutions to the Problem of Harmful Externalities*, 55 *J.L. & Econ.* (forthcoming Nov. 2011) (manuscript at 3) [hereinafter Shavell, *Harmful Externalities*], available at <http://www.nber.org/papers/w16235> (on file with the *Columbia Law Review*) (attempting “to achieve an understanding of the relative merits of liability and of taxation”).

274. See Shavell, *Corrective Taxation*, *supra* note 273, at 273 n.1 (pointing out that “[a]lmost no attention has been paid to liability as an alternative to corrective taxation”). For two notable exceptions, see A. Mitchell Polinsky, *Controlling Externalities and Protecting Entitlements: Property Right, Liability Rule, and Tax-Subsidy Approaches*, 8 *J. Legal Stud.* 1, 2 (1979) (comparing property rules, liability rules, and corrective taxes “in a two-party externality problem in which the parties are able to bargain”); Michelle J. White & Donald Wittman, *A Comparison of Taxes, Regulation, and Liability Rules Under Imperfect Information*, 12 *J. Legal Stud.* 413, 413 (1983) (presenting “general framework for analyzing the costs of operating different types of pollution control programs under the assumption of imperfect information”).

275. Specifically, in many circumstances, liability may be superior to taxation because “employing taxes that properly reflect the usually numerous variables that significantly affect expected harm” may be an “impracticality,” the government “need only measure the harm under strict liability to create desirable incentives,” the imposition of liability through a negligence rule, unlike a reliance on taxes, “generates desirable incentives to control dimensions of care,” and liability may entail “administrative cost advantages . . . deriving from its being applied only when harm occurs.” Shavell, *Harmful Externalities*, *supra* note 273, at 26. However, in other circumstances, including pollution controls, taxation may be superior to liability as the “incentives under liability would be significantly diluted by the inability of victims to attribute harm to injurers and to related problems in bringing suit.” *Id.* at 27.

276. As discussed above, “property rules” are also not an adequate solution for deterring strategic spillovers. See *supra* notes 80–89 and accompanying text (discussing how a party may use an injunction, or the threat of an injunction, to extract payment and describing how this type of opportunistic behavior is possible regardless of whether plaintiff or defendant has the entitlement).

1. *Financial Disclosures.* — As noted above, the difficulty with strategic spillovers frequently involves a problem of asymmetric information.²⁷⁷ An opportunistic party knows the private benefits and costs of its own activities, but the potential victims usually do not have access to this information.²⁷⁸ Many of the traditional mechanisms for resolving externalities rely on forcing a party to internalize the external effects of its activities.²⁷⁹ However, this internalization of externalities might be unnecessary for deterring strategic spillovers if potential victims had some way of knowing that, in the absence of the externality, the opportunistic party would have no incentive to engage in the activity.²⁸⁰

Therefore, one possibility for addressing strategic spillovers is to require greater disclosure of financial information from parties that are engaging in externality-generating activities.²⁸¹ Such disclosure might be made before the fact to a regulatory agency or other administrative body as a prerequisite of engaging in an activity. Alternatively, disclosure might be made after the fact to a court or arbitrator during a litigation or arbitration. Moreover, disclosure might be mandatory (e.g., government audits or motions to compel) or discretionary (e.g., private audits or voluntary compliance).²⁸² Whatever the institutional mechanism, to the extent the opportunistic party disclosed truthful and accurate information about the private benefits and costs of an activity, the opportunistic party would presumably be unable to make a credible threat to extract a payment. Potential victims, as well as public officials, would most likely be unwilling to pay if an opportunistic party's private costs exceeded its private benefits.

Increasing financial disclosures may be one aspect of the solution, but auditing is unlikely to be a panacea. First, auditing, either ex ante by

277. See *supra* note 57 and accompanying text (discussing asymmetric information and opportunistic behavior).

278. See *supra* note 58 and accompanying text (discussing underlying problem of asymmetric information and how opportunist might exploit informational advantage).

279. See *supra* note 47 and accompanying text (discussing internalization of externalities); see also *supra* Part IV.A.4 (discussing internalization through liability rules or corrective taxes).

280. See *supra* notes 56 and 58 and accompanying text (discussing how perfect information might thwart strategic spillovers).

281. In general, debates about disclosure are ubiquitous because “[f]ederal securities law imposes extensive mandatory disclosure obligations on public corporations” William T. Allen, Reinier Kraakman & Guhan Subramanian, *Commentaries and Cases on the Law of Business Organization* 132 (2d ed. 2007); see also Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. Chi. L. Rev. 1047, 1048 (1995) (contending “principal purpose of mandatory disclosure is to address certain agency problems”).

282. For an examination of mandatory versus discretionary disclosure in the securities context, see Joseph A. Franco, *Why Antifraud Prohibitions Are Not Enough: The Significance of Opportunism, Candor and Signaling in the Economic Case for Mandatory Securities Disclosure*, 2002 Colum. Bus. L. Rev. 223, 292 (“Mandatory disclosure requirements, like antifraud provisions, discourage opportunistic forms of quality disclosure and thereby increase the average disclosure quality of issuers generally.”).

regulators or ex post through the courts, is time consuming and expensive.²⁸³ Although strategic spillovers could be detected if auditing were costless and error-free,²⁸⁴ auditing is costly and subject to human limitations.²⁸⁵ Second, in response to a request for information, a party being audited or a firm performing the audit may act opportunistically.²⁸⁶ For example, the party might strategically disclose too much information,²⁸⁷ or an auditor might perform a low-quality review due to the low probability that the auditor's opportunism will ever be detected.²⁸⁸ Third, the right not to disclose the private benefits and costs of an activity is sometimes socially beneficial. Specifically, individuals and firms are often unwilling to disclose various types of proprietary information, especially relating to their business plans, litigation strategies, or trade secrets, and requiring disclosure of such information may reduce their incentives to compete or innovate.²⁸⁹ Fourth, although disclosure may be beneficial if a firm is subject to securities laws or a litigant is required to provide information during discovery, disclosure may be less practicable in other contexts. For example, in attempting to deter legislative threats, it would be

283. See, e.g., Richard Lavoie, *Deputizing the Gunslingers: Co-Opting the Tax Bar into Dissuading Corporate Tax Shelters*, 21 Va. Tax Rev. 43, 64–65 (2001) (“[C]onducting audits is expensive and time consuming.”); Lisa J. Hamm Winnenauer, *To Tell or Not to Tell: Latent Environmental Effects and the Doctrine of Caveat Emptor in Real Property Sales*, 1 Mo. Envtl. L. & Pol’y Rev. 83, 86 n.73 (1993) (“[E]nvironmental audits are typically both time consuming and expensive.”).

284. Cf. Mehmet Bac & Parimal Kanti Bag, *Graduated Penalty Scheme*, 29 Int’l Rev. L. & Econ. 281, 282 n.5 (2009) (“If auditing were costless and perfect, opportunistic defaults could be eliminated.”).

285. See Frank B. Cross & Robert A. Prentice, *The Economic Value of Securities Regulation*, 28 Cardozo L. Rev. 333, 352 (2006) (“Auditors are humans and subject to the same cognitive shortcomings, even irrationalities, that affect all humans.”); A. Mitchell Polinsky, *Optimal Fines and Auditing when Wealth Is Costly to Observe*, 26 Int’l Rev. L. & Econ. 323, 324 (2006) (explicitly incorporating “cost of an audit” into enforcement authority’s ability to acquire private information).

286. See Cross & Prentice, *supra* note 285, at 351 (“Outside auditors have shown themselves to be every bit as opportunistic as other informational intermediaries.”).

287. See Joshua D. Blank, *Overcoming Overdisclosure: Toward Tax Shelter Detection*, 56 UCLA L. Rev. 1629, 1632 (2009) (arguing mandatory disclosure can result in opportunistic “overdisclos[ure] in an attempt to avoid detection of abusive tax planning”).

288. See Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight into Securities Fraud Litigation*, 95 Nw. U. L. Rev. 133, 217 (2000) (noting “it is possible for an audit firm to engage in opportunistic behavior by performing a low-quality audit that is never discovered” and, “[i]f an audit failure is discovered, financial statement users will not know whether the audit firm’s failure was due to opportunistic behavior, human frailty, a rogue employee, or bad luck”).

289. See, e.g., Posner, *Economic Analysis*, *supra* note 6, at 609 (“Mandatory disclosure can also undermine the use of secrecy as a legitimate device for appropriating the benefits of being the first company to make a valuable discovery or to obtain commercially valuable information.”).

difficult to compel a legislator to reveal her internal motivation for deciding to propose a new piece of legislation.²⁹⁰

Nonetheless, regulators have attempted to require disclosures or engage in auditing to deter certain types of strategic spillovers. For example, because of the concern regarding opportunism in the market for carbon offset credits,²⁹¹ “some carbon sequestration accounting standards require that an economic analysis be performed to determine if an economically rational owner of the project area would have undertaken the project without the project generating any carbon offsets credits.”²⁹² If the owner would have undertaken the project even in the absence of the offset credits, the project does not satisfy the additionality requirement, and no subsidy is awarded.²⁹³ However, to date, there is no consensus on the appropriate definition of additionality or how to implement additionality in practice.²⁹⁴

2. *Inalienability*. — In a recent article, Lee Fennell proposes inalienability as another mechanism for discouraging certain types of strategic behavior.²⁹⁵ Fennell explores inalienability not in the usual context of whether human organs or legal rights should be transferable but instead

290. See John Hart Ely, *Legislative and Administrative Motivation in Constitutional Law*, 79 *Yale L.J.* 1205, 1279 (1970) (“The difficulty of determining motivation must never be entirely discounted.”).

291. See *supra* Part II.B (discussing Chinese chemical plants’ alleged manipulation of certified emissions reductions).

292. Peter L. Gray & Geraldine E. Edens, *Carbon Accounting: A Practical Guide for Lawyers*, *Nat. Resources & Env’t*, Winter 2008, at 41, 44, 49; see also James L. Olmsted, *The Global Warming Crisis: An Analytical Framework to Regional Responses*, 23 *J. Env’t. L. & Litig.* 125, 163 (2008) (“One way to prevent the expenditure of carbon offset funding for pre-existing or already funded projects is to require that any carbon offsets demonstrate ‘additionality’ . . . mean[ing] that any anti-global warming program for which funding from offsets [is] used would not have taken place *but for* the offsets program.”).

293. See Gray & Edens, *supra* note 292, at 49 (stating “project does not satisfy the additionality requirement” if owner would have undertaken it in the absence of carbon offset credits). On the principle of additionality, see *supra* notes 137–138 and accompanying text.

294. See John Copeland Nagle, *Discounting China’s CDM Dams*, 7 *Loy. U. Chi. Int’l L. Rev.* 9, 14 (2009) (“The ‘additionality requirement’ has been the target of particular skepticism . . . [and] there remains a substantial uncertainty surrounding the true emissions savings resulting from foreign investment in projects in the developing world.”); Mark C. Trexler, Laura H. Kosloff & Carol Hu., *Developing Project-Level Emissions Reductions at the State Level*, 14 *Widener L.J.* 269, 272 (2004) (“The lack of a concrete definition of additionality has allowed for development of widely divergent interpretations of how additionality should be applied.” (footnote omitted)); Michael Wara, *Measuring the Clean Development Mechanism’s Performance and Potential*, 55 *UCLA L. Rev.* 1759, 1799 (2008) (discussing problems with existing criteria for additionality and recommending reforms to existing CDM structure but noting such reforms “do not resolve the issue of how to separate additional from nonadditional projects in regulated and state-owned industries like the Chinese energy sector”).

295. Fennell, *Adjusting Alienability*, *supra* note 38. As noted above, Calabresi and Melamed discussed inalienability, as well as property and liability rules, in their classic article, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*. Calabresi & Melamed, *supra* note 85, at 1111–15.

to analyze the potential of inalienability rules “as tools for achieving efficiency (or other ends) when applied to resources that society generally views as appropriate objects of market transactions.”²⁹⁶

A number of the examples discussed above are situations that Fennell explicitly addresses.²⁹⁷ For example, Fennell mentions the problems created by cybersquatters, patent trolls, and certain land-use entitlements (including variations on the strategic spillovers in nuisance, coming to the nuisance, and spite fences).²⁹⁸ She also points out, citing an earlier version of this Article, that “[m]any similar problems of the ‘pay me not to’ or ‘pay me to stop’ variety can be readily imagined.”²⁹⁹ Fennell contends that the legal system might be able to address the opportunism present in such situations through the use of inalienability rules.³⁰⁰ She focuses on “inalienability’s capacity to alter upstream decisions by would-be resellers about whether to acquire an entitlement in the first place.”³⁰¹ For example, if cybersquatters or patent trolls are unable to extract a payment ex post, these parties will not have an incentive to acquire a domain name or patent for opportunistic reasons ex ante.³⁰²

Adjusting alienability is a potentially useful tool for deterring certain types of strategic spillovers. However, as Fennell acknowledges, inalienability rules have their own limitations.³⁰³ Most importantly, by prohibiting transfers in which one party may have acted strategically, inalienability not only blocks strategic spillovers but it also may deter socially desirable activities because “any restriction on alienability carries the potential to inefficiently block the flow of goods to higher-valuing users.”³⁰⁴ Fennell attempts to mitigate this problem by advocating an increased reliance on put options and transfer protocols such as Vickrey auctions.³⁰⁵ A related

296. Fennell, *Adjusting Alienability*, supra note 38, at 1406.

297. See supra Parts II.A, II.C (discussing strategic spillovers arising in contexts of property and intellectual property law).

298. Fennell, *Adjusting Alienability*, supra note 38, at 1413–17, 1454–55.

299. *Id.* at 1417 (citing Daniel B. Kelly, *Strategic Spillovers* (Dec. 13, 2008) (unpublished manuscript) (on file with the *Columbia Law Review*)).

300. See *id.* at 1405 (“Concern about such strategic acquisition for resale surfaces in a variety of contexts, from blackmail to cybersquatting to ticket scalping to water speculation. Yet the connections between these concerns and alienability as an attribute of property remain largely unexplored.”).

301. *Id.* at 1406.

302. See *id.* at 1420 (“Foreseeing the inability to sell, those motivated solely by resale opportunities would simply select out of the market.”).

303. See *id.* at 1451 (“We have good reason to be suspicious of inalienability: it can lock entitlements into inefficient uses. We should not be surprised, then, to see that the law usually targets other attributes of property when strategic dilemmas loom.”).

304. *Id.* at 1408; see also Fitzpatrick, supra note 204, at 1662 (“Inalienability rules typically come with one very big downside: unless they can somehow be restricted only to strategic acquirers, they will prohibit utility-enhancing transactions as well as utility-diminishing ones.”).

305. See Fennell, *Adjusting Alienability*, supra note 38, at 1457–63 (arguing put options and transfer protocols such as Vickrey auctions can reduce inefficiencies associated with inalienability rules).

limitation of inalienability rules is that it is “very difficult” to tell “one’s reason for wishing to engage” in a given action,³⁰⁶ and an interest in selling an entitlement is not necessarily relevant or dispositive for determining a party’s motivation.³⁰⁷ Overall, as Fennell concludes, “[w]hether inalienability rules offer the best chance for increasing surplus or achieving other goals in a given context is a comparative inquiry that turns on the feasibility, efficacy, and normative desirability of other courses of action, including doing nothing.”³⁰⁸

Nevertheless, inalienability may prove useful in addressing at least one type of strategic spillover: objector blackmail.³⁰⁹ Brian Fitzpatrick, citing Fennell, notes that “inalienability rules separate those persons who wish to acquire an entitlement for strategic reasons from those sellers who genuinely value the entitlement.”³¹⁰ Applying inalienability rules to objector blackmail, Fitzpatrick argues: “If objectors were prohibited from selling their right to appeal to class counsel, then objectors who wished to appeal solely to extract rents from class counsel eager to avoid delay, risk, and litigation costs would not bother filing appeals at all.”³¹¹ He notes, “At the same time, no legitimate objector would be discouraged from having their appeals heard in the face of an inalienability rule.”³¹² Because “an inalienability rule can thwart blackmail-minded objectors at the same time it leaves access to appellate review open for sincere objectors,”³¹³ inalienability disentangles opportunism from self-interest and, as Fitzpatrick concludes, “may be the optimal solution to the problem of objector blackmail.”³¹⁴

Closely related to inalienability rules is another potential solution based on the nonenforcement of contracts. By refusing to enforce a contract between a strategic party and potential victims, the court might eliminate the incentive for a party to impose externalities opportunistically. Knowing a contract is unenforceable, potential victims may not be willing to pay a strategic party. And, the strategic party, realizing potential victims may be unwilling to pay, may not attempt to extract a payment. But the problem, once again, is the difficulty of distinguishing between contracts

306. *Id.* at 1454.

307. See *supra* text accompanying notes 251–252.

308. Fennell, *Adjusting Alienability*, *supra* note 38, at 1463.

309. On objector blackmail, see *supra* notes 203–208 and accompanying text.

310. Fitzpatrick, *supra* note 204, at 1661 (citing Fennell, *Adjusting Alienability*, *supra* note 38, at 1424).

311. *Id.* at 1662.

312. *Id.*

313. *Id.*

314. *Id.* at 1664. Fitzpatrick points out that inalienability rules also might be relevant for deterring negative expected value suits. See *id.* at 1661 (characterizing proposal “calling for a prohibition on the ability to settle litigation before summary judgment” in Randy Kozel & David Rosenberg, *Solving the Nuisance Value Settlement Problem: Mandatory Summary Judgment*, 90 *Va. L. Rev.* 1849 (2004), as “example of an inalienability rule”).

for resolving conventional externalities and contracts involving strategic spillovers.³¹⁵

3. *Equity*. — Another approach, relying on equity, is perhaps the oldest of the aforementioned mechanisms for addressing strategic behavior. In a recent paper, Henry Smith sheds new light on the function of equity by suggesting that “equity in private law . . . is a coherent package of features motivated largely by one overriding goal: preventing opportunism.”³¹⁶

Smith cites some historical evidence that judges and commentators viewed equity as a mechanism for addressing opportunism.³¹⁷ But Smith’s primary objective is to analyze the functional basis for equity and equitable maxims.³¹⁸ As noted above, Smith defines opportunism as “behavior that is undesirable but that cannot be cost-effectively captured—defined, detected, and deterred—by explicit ex ante rulemaking.”³¹⁹ Based on this definition, courts of equity were necessary, in Smith’s view, to supplement common law courts because common law courts could not adequately consider the many circumstances in which a strategic motivation may have played a role in the actions of a plaintiff or defendant.³²⁰ Equity, including the maxims of equity, provided a “private law solution to opportunism.”³²¹

315. See Fennell, *Adjusting Alienability*, *supra* note 38, at 1454–55 (discussing how inalienability rules could “screen out those building [a spite fence] for strategic reasons” but noting that “by blocking potential bargains, such rules risk leaving in place inefficiently ugly but earnestly constructed fences”). Nonenforcement is a standard solution in the context of blackmail, see, for example, Joseph Isenbergh, *Blackmail from A to C*, 141 U. Pa. L. Rev. 1905, 1925–32 (1993) (arguing that refusing to enforce certain blackmail contracts is superior to criminalizing blackmail), but nonenforcement is sometimes ineffective as a blackmailer often can demand a cash transfer “up front” or, even if there is an agreement, courts may have difficulty identifying blackmail, see Shavell, *Blackmail*, *supra* note 235, at 1890 (explaining that “it is frequently difficult to obtain evidence that a blackmailer made a threat”).

316. Smith, *Law Versus Equity*, *supra* note 38, at 3.

317. *Id.* at 5 (“Justice Story recognized that it is foundational that equity must be open-textured in light of the ability of parties to opportunistically evade their obligations, or as he put it, ‘[f]raud is infinite’ given the ‘fertility of man’s invention.’” (quoting 1 Joseph Story, *Commentaries on Equity Jurisprudence*, as Administered in England and America 184 n.1 (9th ed. 1866) (alteration in Smith))).

318. *Id.* at 4 (“This paper offers a functional rather than a historical account of equity.”).

319. *Id.* at 9.

320. See *id.* at 10, 38 (describing opportunism as major problem because of common law’s reliance on modular structures for governing behavior of most people in most cases and arguing that “decision making that is a hybrid between law and equity is likely to be superior to law or equity alone”); cf. Rose, *Crystals and Mud*, *supra* note 182, at 604 n.139 (noting “post-hoc mud rules” might be more efficient “where the costs of getting information in advance are high, or where one party effectively blocks information to another”).

321. Smith, *Law Versus Equity*, *supra* note 38, at 17.

For example, Smith highlights the maxim that “[e]quity will not allow a wrongdoer to profit from his own wrong.”³²² He describes this maxim as “almost a statement of the anti-opportunism principle.”³²³ Likewise, Smith points out that equity “uses disproportionate hardship as one of its main proxies for opportunism.”³²⁴ He also notes that, because injunctions can themselves facilitate opportunism, a possibility explored above in the context of a strategic coming to the nuisance and patent trolls,³²⁵ injunctions are a discretionary remedy.³²⁶

However, relying on equity to address strategic spillovers has certain limitations. First, despite the possibility that equity courts may have enjoyed a comparative advantage over common law courts in detecting opportunism, it is still difficult for equity courts (then) or any court (now) to distinguish between conventional externalities and strategic spillovers.³²⁷ Second, as *Edwards v. Allouez* illustrates,³²⁸ and as Smith acknowledges,³²⁹ a party may use the threat of injunctive relief itself in attempting to extract a payment.³³⁰ Third, while equity may perform a significant function detecting opportunism in disputes involving a small number of participants in a relatively circumscribed area, it is less clear whether equity is capable of providing a comprehensive solution for complex global issues like the opportunistic use of carbon offsets and the principle of additionality in international environmental law. Still, Smith’s exploration of equity suggests that the legal system’s struggle with the appropriate way to prevent opportunism is a perennial problem.

4. *Abuse of Right*. — Unlike the United States, many civil law countries attempt to address explicitly the type of opportunism inherent in strategic spillovers.³³¹ To do so, these countries employ a legal doctrine

322. *Id.* at 28.

323. *Id.*

324. *Id.* at 33; see also *id.* (noting that “a (perhaps somewhat broader) notion of disproportionate hardship lies at the heart of the civil law doctrine of abuse of right, which despite the lack of equity courts in such systems, resembles my reconstruction of equity as an anti-opportunism device”). On “abuse of right,” see *infra* Part IV.B.4 (describing abuse of right, a doctrine frequently utilized in civil law, but not common law, countries, as a potential deterrent to strategic spillovers).

325. See *supra* notes 81–84 and accompanying text (discussing strategic coming to the nuisance); *supra* notes 153–155 (discussing patent trolls).

326. Smith, Law Versus Equity, *supra* note 38, at 36–37 (discussing *eBay Inc. v. MercExchange L.L.C.*, 547 U.S. 388 (2006), and problem of patent trolls).

327. See *id.* at 29 (“Notice that the standard for the maxim to apply to avoid the straightforward application of the [law] is absurdity or (manifest) unreasonableness. Equity is not supposed to be used for borderline policy calls . . .”).

328. 38 Mich. 46 (1878); see also *supra* notes 80–83 and accompanying text (discussing case).

329. See *supra* note 326 and accompanying text.

330. See Yorio, *supra* note 81, at 85 (noting “peculiar facts of *Edwards* dramatize how equitable remedies may be used to extort overcompensatory settlements”).

331. I thank Holger Spamann for bringing this point to my attention.

known as “abuse of right.”³³² Under the abuse of right doctrine, a court may prohibit an individual from engaging in what would otherwise be a valid exercise of a legal right if the person is exercising the right for an illegitimate reason. For example, the German Civil Code states: “The exercise of a right which can only have the purpose of causing injury to another is unlawful.”³³³ The concept exists in many civil law jurisdictions, including France, Germany, Italy, Japan, the Netherlands, Quebec, Spain, and Switzerland.³³⁴

As noted above, Henry Smith observed that equity serves an anti-opportunism function in deterring “behavior that is undesirable but that cannot be cost-effectively captured . . . by explicit ex ante rulemaking.”³³⁵ The idea of abuse of right remains “an enduring element of the civil law”³³⁶ at least in part for the same reason: “While the rules [the legislator] promulgates are becoming increasingly precise and detailed, he cannot foresee every eventuality.”³³⁷ As a result, “the proscription of abuse of rights makes it possible to establish the connection between the justice ostensibly guaranteed by positive law and genuine justice.”³³⁸

While prevalent in the civil law tradition, the “principle of abuse of rights is not so readily apparent in common law systems.”³³⁹ However, Joseph Perillo has argued “such a doctrine exists in American law and is employed under such labels as nuisance, duress, good faith, economic waste, public policy, misuse of copyright and patent rights, lack of business purpose in tax law, extortion, and others.”³⁴⁰ But Perillo contends

332. See generally Michael Byers, *Abuse of Rights: An Old Principle, a New Age*, 47 McGill L.J. 389 (2002) (examining doctrine’s origin and explaining its significance in various international issues including transboundary pollution); John H. Crabb, *The French Concept of Abuse of Rights*, 6 Inter-Am. L. Rev. 1 (1964) (discussing doctrine’s civil law roots and contemporary use in France); Antonio Gambaro, *Abuse of Rights in Civil Law Tradition*, in *Aequitas and Equity: Equity in Civil Law and Mixed Jurisdictions* 632 (Alfredo Mordechai Rabello ed., 1997).

333. Bürgerliches Gesetzbuch [BGB] [Civil Code], Aug. 18, 1896, *The German Civil Code: Translated and Annotated* 59, § 226.

334. See Byers, *supra* note 332, at 392–95 (discussing civil law systems). For an analytical investigation into the meaning of “abuse of rights,” see Frederick Schauer, *Can Rights Be Abused?*, 31 Phil. Q. 225 (1981).

335. Smith, *Law Versus Equity*, *supra* note 38, at 9.

336. Byers, *supra* note 332, at 395.

337. J. Voyame, B. Cottier & B. Rocha, *Abuse of Rights in Comparative Law*, in *Abuse of Rights and Equivalent Concepts: The Principle and Its Present Day Application* 23, 48 (Council of Eur. 1990) 1989.

338. *Id.*

339. Byers, *supra* note 332, at 395.

340. Perillo, *supra* note 198, at 40; see also Anna di Robilant, *Abuse of Rights: The Continental Drug and the Common Law*, 61 Hastings L.J. 687, 695 (2010) (suggesting that “in vast and highly transversal areas of the law, such as water law, nuisance, tortious interference with contractual relations or economic expectancies, and labor law, nineteenth- and early-twentieth-century American courts weighed defendants’ motives and conduct through malice tests and reasonable user rules that closely parallel abuse of rights”).

that “the lack of an overt recognition of a doctrine of ‘abuse of rights’ creates injustices in cases not falling within one of these doctrines.”³⁴¹ More recently, Larissa Katz also has explored the idea of “abuse of right” in the common law tradition.³⁴² Based on her findings, Katz claims that there is a principle analogous to “abuse of right” in the common law and that this principle prohibits owners from using property in ways “that even they do not deem to be valuable (but merely deem to be useful as ways to harm another or to gain leverage for some further negotiation).”³⁴³ Katz cites the cases involving “spite fences” as one example among many in which a property owner may “attempt to use the privileges and rights of owner as a pretext, where the real purpose is to cause harm.”³⁴⁴

One substantial problem with utilizing the “abuse of right” doctrine to deter strategic spillovers in any legal system, including common law systems like the U.S., is the difficulty of applying the concept in concrete cases. Although abuse of right may provide courts with a legal justification for examining a party’s motivation, the doctrine, by itself, does not provide a functional test for distinguishing self-interested from opportunistic behavior.³⁴⁵ Nonetheless, this comparative perspective suggests the feasibility, and perhaps desirability, of beginning to address strategic spillovers more systematically.³⁴⁶

341. Perillo, *supra* note 198, at 40; cf. di Robilant, *supra* note 340, at 710–11 (discussing why “‘malice’ and ‘reasonableness’ rules never congealed into a unitary category of ‘abuse of rights’”).

342. Larissa Katz, *A Jurisdictional Principle of Abuse of Right* (Feb. 8, 2010) (unpublished manuscript) (on file with the *Columbia Law Review*).

343. *Id.* at 1–2.

344. *Id.* at 22 & n.41.

345. Cf. William W. Park, *Fiscal Jurisdiction and Accrual Basis Taxation: Lifting the Corporate Veil to Tax Foreign Company Profits*, 78 *Colum. L. Rev.* 1609, 1656–57 (1978) (noting that, because of “subjectivity involved” in determining abuse of rights, “doctrine would be difficult to apply to extraterritorial fiscal jurisdiction”); see also Irina Petrova, Note, “Stepping on the Shoulders of a Drowning Man” The Doctrine of Abuse of Right as a Tool for Reducing Damages for Lost Profits: Troubling Lessons from the Patuha and Himpurna Arbitrations, 35 *Geo. J. Int’l L.* 455, 463 (2004) (“Although there is a lot of commentary dealing with the abuse of right doctrine, precisely what acts constitute an abuse of right has proven very difficult to define.”).

346. Because opportunism is difficult to detect, alternative approaches like disclosure, inalienability, equity, and abuse of right, as well as traditional mechanisms like liability rules or corrective taxes, may be insufficient for deterring strategic spillovers. If the probability of detecting strategic spillovers is relatively small, supracompensatory remedies such as punitive damages or criminal sanctions may be necessary. See Walter Kamiat, Labor and Lemons: Efficient Norms in the Internal Labor Market and the Possible Failures of Individual Contracting, 144 *U. Pa. L. Rev.* 1953, 1970 n.27 (1996) (“[H]ard-to-detect opportunism must be subject to quite severe sanctions if it is to be effectively deterred.” (citing Edward B. Rock & Michael L. Wachter, *The Enforceability of Norms and the Employment Relationship*, 144 *U. Pa. L. Rev.* 1913, 1924–25 (1996))); A. Mitchell Polinsky & Steven Shavell, *Punitive Damages: An Economic Analysis*, 111 *Harv. L. Rev.* 869, 887–96 (1998) (arguing where injurers can sometimes escape liability, damages should be increased on those found liable to achieve optimal deterrence); Shavell, *Foundations*,

C. *Nonlegal Limitations for Minimizing Strategic Spillovers*

There are several reasons why, irrespective of the applicable legal rule or even in the absence of any legal rule, an individual or firm may decide *not* to engage in a strategic spillover. As an initial matter, engaging in a strategic spillover involves opportunity costs, i.e., the foregone benefits of not engaging in other activities. The potential benefits of pursuing other activities are often sufficiently high to dissuade a party from engaging in, or even contemplating, a strategic spillover.³⁴⁷ Other nonlegal limitations include transaction costs, reputation effects, and social norms.

First, transaction costs might deter parties from attempting to profit from activities they otherwise would not have undertaken. As noted above, the concern about “pollution entrepreneurs” was, until recently, primarily a matter of theoretical interest.³⁴⁸ The transaction costs of collecting payments from a large number of victims, some of whom may have been unaware of the harm being imposed, was most likely prohibitive.

Second, parties may refrain from strategic spillovers if they are concerned that engaging in such actions could be detrimental to their reputations.³⁴⁹ For example, a landowner may decide not to attempt to extract payments by building a spite structure if she knows she is in a repeat game with her neighbor.³⁵⁰

supra note 6, at 540–47 (discussing why criminal law may be necessary to deter acts in which “individual intends to do significant harm” or “actor has attempted to conceal . . . responsibility”).

347. Opportunity costs also help to explain why, in a particular industry, the competitors of an opportunistic party may decide not to adopt a similar strategy of engaging in a strategic spillover.

348. See supra notes 120–121 and accompanying text (suggesting transaction costs historically have prevented firms from purposely producing unnecessary pollution to extract payments).

349. See Muris, supra note 239, at 527 (“[I]f good reputation has importance to the potential opportunist, the risk of a bad reputation may deter some acts of opportunism.”); cf. A. Mitchell Polinsky & Steven Shavell, *The Uneasy Case for Product Liability*, 123 Harv. L. Rev. 1437, 1478 (2010) (questioning “Justice Traynor’s view that firms employ their reputations opportunistically to sell risky products”); David T. Robinson & Toby E. Stuart, *Network Effects in the Governance of Strategic Alliances*, 23 J.L. Econ. & Org. 242, 250 (2007) (noting “potential long-term reputation cost of opportunistic behavior in transactions with centrally positioned clients”).

350. See Robert D. Cooter, *Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant*, 144 U. Pa. L. Rev. 1643, 1659 (1996) (“The problem of opportunistic behavior is solvable in many repeated games when players commit to an enduring relationship—provided that they can observe each others’ moves and they do not discount the future too heavily.”); see also Pedro Dal Bó & Guillaume R. Fréchette, *The Evolution of Cooperation in Infinitely Repeated Games: Experimental Evidence*, 101 Am. Econ. Rev. 411, 411 (2011) (presenting “experimental evidence on the evolution of cooperation in infinitely repeated games”). For the seminal analysis of repeat play in resolving strategic games, see Robert Axelrod, *The Evolution of Cooperation* (1984).

Third, basic social norms of reciprocity and decency often discourage this type of opportunistic behavior.³⁵¹ Social norms are relatively effective at preventing opportunism among family, friends, and neighbors.³⁵² However, the effectiveness of social norms is less clear with regard to strangers, parties in arms-length transactions, and participants in a large and diffuse marketplace.³⁵³

Unfortunately, as one can infer from the various strategic spillovers discussed above,³⁵⁴ these nonlegal limitations are sometimes insufficient to deter opportunistic behavior.³⁵⁵ It is also possible that, with the arrival of technological advances such as the Internet, these nonlegal limitations may be weakening, at least to a degree.³⁵⁶

Take the bizarre case of Toby the Bunny, in which an individual, whose alias was “James McEahly,” attempted to extort money on the Internet by threatening to kill Toby unless payments were made to his bank account.³⁵⁷ Essentially, McEahly was attempting to extract payments by imposing harm on others who might suffer mental anguish and emotional distress from seeing his bunny killed.³⁵⁸ Presumably, in the absence of such payments, McEahly would not have had any reason to tar-

351. See Eric A. Posner, *Law and Social Norms* 74 (2000) (discussing “additional nonlegal sanctions . . . that help deter opportunistic behavior”); Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 *Harv. L. Rev.* 961, 973 (2001) (discussing how social norms “curb opportunistic behavior in everyday life”); see also Fennell, *Adjusting Alienability*, *supra* note 38, at 1454 n.231 (observing that “[s]ocial norms, rather than legal prohibitions” may deter bargaining between neighbors because “offering cash to one’s neighbor to stop [engaging in certain activities] couples a direct insult with the interjection of money into a setting where it is likely to seem inappropriate”).

352. See Robert C. Ellickson, *Unpacking the Household: Informal Property Rights Around the Hearth*, 116 *Yale L.J.* 226, 250 (2006) (“[I]n most societies ambient social norms support loyalty to kin. An opportunistic act at the expense of kinfolk thus is particularly likely to provoke neighbors to inflict diffuse third-party sanctions, such as negative gossip.”).

353. But see Lior Jacob Strahilevitz, *Social Norms from Close-Knit Groups to Loose-Knit Groups*, 70 *U. Chi. L. Rev.* 359, 361–65 (2003) (noting “cooperation-promoting norms” can exist even in “non-close-knit settings”).

354. See *supra* Part II (exploring examples of strategic spillovers in property, environmental law, intellectual property, corporate law, legislation and regulation, and litigation and settlement).

355. See Douglass C. North & Barry R. Weingast, *Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England*, in *Empirical Studies in Institutional Change* 134, 136–39 (Lee J. Alston, Thrainn Eggertsson & Douglas C. North eds., 1996) (discussing “insufficiency of repeat play and reputation to prevent renegeing”).

356. See April Mara Major, *Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution*, 78 *Wash. U. L.Q.* 59, 105 n.187 (2000) (explaining that “the Internet is not a close knit society, but instead a digital society as heterogeneous as society itself”).

357. See generally Stephen E. Sachs, *Comment, Saving Toby: Extortion, Blackmail, and the Right to Destroy*, 24 *Yale L. & Pol’y Rev.* 251 (2006) (detailing Toby the Bunny case).

358. See *id.* at 252 (“McEahly has committed to killing Toby only because he hopes that someone else will pay him not to.”).

get the hapless bunny. The strategic spillover was likely possible only because the Internet had lowered transaction costs—the costs of transmitting the threat, finding an audience willing to pay, and collecting payments. Moreover, by allowing such threats to be made anonymously, the Internet may have diminished the effectiveness of reputation costs and social norms in deterring this type of strategic spillover.³⁵⁹

The Internet also may enable strategic parties to extract payments from businesses and others with an interest in maintaining their reputations. For example, in *Monex Deposit Co. v. Gilliam*, Monex filed a complaint against three defendants for publishing MonexFraud.com, a website “rife with defamatory statements” that the defendants allegedly had posted “to extort money from Monex.”³⁶⁰ Monex claimed the defendants had threatened that “they would continue to libel Monex on their website, would share information with government regulators, and would interfere with Monex’s relationships with investors and banks” unless Monex agreed to pay \$20 million.³⁶¹ Similarly, a veterinarian recently filed a class action against Yelp, a website that millions of people use each month for reviews of local businesses.³⁶² The veterinarian became suspicious of Yelp when his practice received two negative reviews that were identical (except for the sender’s name) and, between the first and second review, Yelp allegedly offered to give the veterinarian more control over his site if he paid \$300 per month.³⁶³ The veterinarian is alleging that Yelp “extorts business owners by promising to hide or bury negative reviews if they agree to purchase a monthly advertising subscription from the company.”³⁶⁴

To be sure, Toby, Monex, and Yelp are just three examples of the types of strategic spillovers that are increasingly possible due to the Internet. However, to the extent transaction costs are decreasing, reputation is less important, and social norms are losing their efficacy, it is possible we may observe an even higher number of strategic spillovers in the future. Correspondingly, the costs of ignoring such spillovers will likely increase.

359. See Julie Seaman, *Hate Speech and Identity Politics: A Situationist Proposal*, 36 Fla. St. U. L. Rev. 99, 113 (2008) (“Countless laboratory and field studies . . . have demonstrated that a feeling of anonymity can often increase—even cause—aggressive, disturbing, and antisocial behavior, including speech.”).

360. First Amended Complaint for Defamation, Civil Extortion, Cyberpiracy, Unfair Competition, Racketeering, Interference with Contract, Trade Libel, Interference with Prospective Economic Advantage, and Trade Secret Misappropriation at 2, *Monex Deposit Co. v. Gilliam*, 680 F. Supp. 2d 1148 (C.D. Cal. 2010) (Case No. SACV 09-287 JVS (RNBx)).

361. *Id.*; see also *Monex Deposit Co. v. Gilliam*, Case No. SACV 09-287 JVS (RNBx), 2010 WL 2349095, at *1–*9 (C.D. Cal. June 1, 2010) (summarizing ultimate findings of fact and conclusions of law).

362. See Ki Mae Heussner, *Yelp Faces Extortion Claim, Class Action Suit*, ABC News (Feb. 26, 2010), <http://abcnews.go.com/Technology/TheLaw/yelp-faces-extortion-claim-class-action-suit/story?id=9944826> (on file with the *Columbia Law Review*).

363. *Id.*

364. *Id.*

V. VARIATIONS OF STRATEGIC SPILLOVERS

A. *Positive Versus Negative Externalities*

Strategic spillovers may arise in situations involving *positive*, as well as *negative*, externalities.³⁶⁵ In fact, opportunistically withholding external benefits may be just as prevalent as, and perhaps more prevalent than, opportunistically imposing external costs.

The classic problem with positive externalities, like the classic problem with negative externalities, is well known: Parties sometimes generate benefits as an *unintended byproduct* of their use of property.³⁶⁶ However, if they are unable to internalize these benefits, parties may forgo certain activities that are socially desirable. For example, the owner of a business may not have a financial incentive to install benches on the sidewalk in front of her shop because a portion of the benefits are enjoyed by other business owners. The primary reason these benefits, so-called "positive externalities," can be socially problematic is straightforward: A party may not have an incentive to engage in an activity because the activity's private costs exceed its private benefits even though, as a result of the externality, the activity is desirable as its social benefits exceed its social costs.³⁶⁷

Yet activities that entail positive externalities can be problematic for another reason as well: Namely, individuals and firms may *purposely* seek to withhold benefits that would be generated in their use of property in order to extract payments from potential beneficiaries who would benefit from their undertaking an activity. In certain situations, a party may refrain from or discontinue a socially desirable externality-generating activity (or threaten to do so) even though the activity's private benefits exceed its private costs. That is, even though, in the absence of the externality, the party would have a sufficient incentive to engage in the activity, the party may not do so. By refraining from or discontinuing the activity (or threatening to do so), the party anticipates the possibility of obtaining a payment, either from the government in the form of a subsidy or from other private parties in the form of a side payment, in exchange for commencing or continuing the activity.

There are many examples in which it is difficult to determine whether a party attempting to obtain a subsidy has a sufficient incentive to engage in the activity. Economic historians, for example, have long disagreed about whether federal loans and land grants to railroad companies were necessary to enable the construction of railroads to the Pacific Ocean.³⁶⁸ Historian Heywood Fleisig concludes that "subsidies to the

365. On positive and negative externalities, see *supra* note 24 and accompanying text.

366. See *supra* note 30 and accompanying text (discussing nature of externalities).

367. See, e.g., Shavell, *Foundations*, *supra* note 6, at 80 (noting, in discussing optimal resolution of external effects, "it will be socially desirable for individuals . . . to engage more often in acts that engender beneficial external benefits than is in their self-interest").

368. Compare Robert W. Fogel, *The Union Pacific Railroad* (1969) (arguing grants were necessary), and Lloyd J. Mercer, *Rates of Return for Land-Grant Railroads: The*

Central Pacific were 'excessive' at the margin, where 'excessive' describes subsidization that influenced neither the decision to invest in the railroad nor the speed of its construction."³⁶⁹ He asserts that "the rate of return excluding land grants was sufficient to have induced construction at a maximum rate of speed, implying that the entire land grant was an excessive subsidy—what a reasonable man might reasonably term a 'give-away.'"³⁷⁰ If subsidies to the Central Pacific were in fact unnecessary, then the costs of lobbying for such subsidies, as well as the administrative costs of providing such subsidies, were a social waste.

Likewise, certain situations in which a developer, corporation, or other private party attempts to assemble multiple parcels of land may involve positive externalities.³⁷¹ To facilitate such assemblies, the government may need to provide a subsidy to the assembler or attempt to assemble the land using eminent domain.³⁷² However, it is often less expensive for an assembler to convince a local government to exercise eminent domain on its behalf than to purchase the parcels in the real estate market.³⁷³ Thus, an assembler might claim the private benefit is insufficient to induce assembly, even though the assembler does have a sufficient incentive to purchase the parcels. Indeed, as I have pointed out elsewhere, "if a party's private incentive would already be substantial enough (i.e., if the private value of assembly is greater than the value to existing owners), then the use of eminent domain would be unnecessary even if a significant externality exists."³⁷⁴

Moreover, even in nonassembly situations, businesses and other property owners whose activities arguably entail positive externalities for the community may threaten to relocate if local officials are not forthcoming with substantial subsidies. Such threats to relocate are often credible, at least for "[c]ompanies that provide towns or cities with substantial

Central Pacific System, 30 J. Econ. Hist. 602, 626 (1970) (contending grants were rational), with Heywood Fleisig, *The Central Pacific Railroad and the Railroad Land Grant Controversy*, 35 J. Econ. Hist. 552, 553 (1975) (arguing grants were excessive).

369. Fleisig, *supra* note 368, at 552–53.

370. *Id.* at 553.

371. See Kelly, *Public Use*, *supra* note 250, at 42 (discussing situations in which "private benefit may not be large enough to induce a private party to assemble property even though a positive externality makes the project socially desirable").

372. See *id.* at 42–45 (discussing positive spillovers associated with land assembly and noting that, if such spillovers are substantial, "government could provide a public subsidy to supplement the private incentive to assemble the property" or invoke eminent domain).

373. See Daniel B. Kelly, *Acquiring Land Through Eminent Domain: Justifications, Limitations, and Alternatives*, in *Research Handbook on the Economics of Property Law* 344, 355 (Kenneth Ayotte & Henry E. Smith eds., 2011) (explaining "private parties often will have an incentive to capture the eminent domain process for their own advantage"); cf. Thomas W. Merrill, *The Economics of Public Use*, 72 *Cornell L. Rev.* 61, 88 n.91 (1986) (noting "[c]ondemnation followed by retransfer is especially likely to engender rent seeking if . . . the price charged by the government on retransfer is less than the compensation awarded under the opportunity cost formula").

374. Kelly, *Public Use*, *supra* note 250, at 43.

tax revenue and that are capable of moving to other locations.”³⁷⁵ For example, JPMorgan Chase hoped to move from midtown to downtown Manhattan in order to build a new office building on the site of the World Trade Center.³⁷⁶ Unsatisfied with a benefits package from the city involving “a combination of tax breaks, cash payments and subsidized electricity benefits worth more than \$100 million,” the company threatened “to move thousands of employees from Midtown to Stamford, Conn., if New York officials [did] not give it a larger subsidy package to build a 50-story skyscraper near ground zero.”³⁷⁷ As the *New York Times* reported:

Officials view the bank’s threat to relocate outside Manhattan as the latest move in what has become a routine game of corporate poker in which companies try to extract special benefits. But Chase has gotten in touch with at least one large property owner in downtown Stamford, although it remains unclear whether the bank is serious or bluffing.³⁷⁸

Eventually, JPMorgan Chase and city officials did reach an agreement,³⁷⁹ but Chase subsequently “abandoned its plan to build a new headquarters for its investment banking division near ground zero.”³⁸⁰

Notably, threatening to relocate to extract a payment is an idea that is not entirely unfamiliar to law professors and other academics. Academics may accept a “visit” at another law school or university to obtain a competing offer and then negotiate for a higher salary at their home institution.³⁸¹

375. Daniel B. Kelly, *Pretextual Takings: Of Private Developers, Local Governments, and Impermissible Favoritism*, 17 *Sup. Ct. Econ. Rev.* 173, 180 (2009).

376. See Charles V. Bagli, *Chase Says It Will Move to Stamford if City Balks*, *N.Y. Times*, Apr. 25, 2007, at B2 (describing “tentative deal with the Port Authority in late March to pay about \$300 million for the development rights at the site of the soon-to-be-demolished Deutsche Bank building”).

377. *Id.*

378. *Id.*

379. Charles V. Bagli, *Chase Bank Set to Build Tower by Ground Zero: Officials Describe Deal with Large Incentives*, *N.Y. Times*, June 14, 2007, at B1 (“After months of sharp bargaining and threats to relocate, JPMorgan Chase is expected to announce today that it has struck a deal to build a skyscraper near ground zero and move its investment banking headquarters from Midtown . . .”).

380. Charles V. Bagli, *As Finance Offices Empty, Developers Rethink Ground Zero*, *N.Y. Times*, April 15, 2009, at A19.

381. See, e.g., Rick Bales, *Comment to Merit Pay and Performance*, *MoneyLaw: The Art of Winning an Unfair Academic Game* (June 27, 2007, 2:36 PM), <http://money-law.blogspot.com/2007/06/merit-pay-and-performance.html> (on file with the *Columbia Law Review*) (“While annual merit increases may be small, my sense is that most deans have the capacity to match lateral offers from elsewhere. This, unfortunately, forces productive faculty to shop themselves on the market if they want a significant raise . . .”); cf. Clayton P. Gillette, *Law School Faculty as Free Agents*, 17 *J. Contemp. Legal Issues* 213, 219 (2008) (noting “free agency should increase income even for those [law professors] who do not move” because “deans have incentives to anticipate and attempt to foreclose financially motivated moves by offering market rate salaries to mobile professors”).

Many of the strategic spillovers discussed above could be characterized as either strategically imposing a harm or strategically withholding a benefit. For example, a developer might threaten to engage in an activity, e.g., building on certain parcels of land, with negative externalities, to extract a payment from a municipality that is interested in preserving open space.³⁸² Alternatively, the developer might refrain from an activity, e.g., not building on certain parcels of land, with positive externalities to extract a payment or subsidy.³⁸³ If “harm-imposing” and “benefit-withholding” actions are indistinguishable, strategic negative spillovers—opportunistically imposing harms on others—and strategic positive spillovers—opportunistically withholding benefits from others—may be functionally equivalent.³⁸⁴

B. *Relevant Versus Irrelevant Externalities*

Strategic spillovers also suggest that certain seemingly “irrelevant externalities” may be relevant. In *Irrelevant Externality Angst*, David Haddock points out that previous work among economists, including James Buchanan and William Stubblebine, has examined how external effects can be irrelevant to efficient resource allocation.³⁸⁵ Haddock agrees that “[e]xternalities, positive and negative, are everywhere but are usually economically meaningless” and that, “[t]hough chronic, such externalities . . . need no regulation.”³⁸⁶ Indeed, the literature on property rights and the internalization of externalities “distinguishes between those ‘relevant’ externalities that ought to be taken into account in policy analysis and ‘irrelevant’ externalities that ought to be discounted.”³⁸⁷

The existence of strategic spillovers does not necessarily undercut the thesis of Buchanan and Stubblebine and of Haddock that certain externalities are irrelevant. However, it does suggest that, even if a party does not have a sufficient incentive to undertake an activity that entails harmful effects, the effects of such an activity are not necessarily irrelevant. The party can threaten to impose such harm on others unless a

382. See *supra* Part II.A.4 (describing strategy by which developers threaten to build to impose costs on municipalities).

383. See *supra* Part II.A.4 (discussing strategy by which developers received tax subsidies for conservation easements).

384. Cf. Shavell, *Foundations*, *supra* note 6, at 79 (“Whether we tend to call an externality harmful or beneficial depends on what we are likely to assume . . . about the standard of reference.”). Another variation worth considering is a hybrid case in which a strategic party purposely engages in an activity that imposes external harm on another party to extract a payment from that party but the activity also generates external benefits for other parties.

385. See generally David D. Haddock, *Irrelevant Externality Angst*, 19 J. Interdisc. Econ. 3, 4–5 (2007) (discussing “neglected idea of Buchanan and Stubblebine” that certain “external impacts on large populations are irrelevant impacts” (citing Buchanan & Stubblebine, *supra* note 29, at 371–72)).

386. David D. Haddock, *When Are Environmental Amenities Policy-Relevant?*, 44 Nat. Resources J. 383, 387 (2004).

387. David W. Barnes, *Trademark Externalities*, 10 Yale J.L. & Tech. 1, 19 (2007).

payment is made.³⁸⁸ Thus, a negative externality may have a positive value, rather than being of zero value, to the party generating the externality. Conversely, even if a party does have a sufficient incentive to undertake an activity that entails beneficial effects, the effects of such an activity are not necessarily irrelevant. The party can threaten to withhold such benefits unless a payment is made.³⁸⁹ Thus, a positive externality also may have a positive value, rather than being of zero value, to the party generating the externality. In short, although it is important to recognize that certain conventional externalities may be irrelevant, it is also important to recognize that certain spillovers are strategic and that these externalities may in fact be relevant.

CONCLUSION

The problem of strategic spillovers involves situations in which parties purposely seek to generate harm in their use of property to extract payments from victims in exchange for desisting. As discussed above, this problem is more pervasive than is ordinarily thought. From historical events like the “livery stable scam” in Chicago to contemporary controversies involving “pollution entrepreneurs” in China, parties may engage or threaten to engage in activities that impose harm on others in order to profit through subsequent bargaining. The Article has highlighted a number of situations in which strategic spillovers arise in property law, environmental law, intellectual property law, corporate law, legislation and regulation, and litigation and settlement, although this list is by no means exhaustive.

In certain circumstances, strategic parties may threaten to engage in externality-generating activities and then bargain with potential victims *ex ante*. In other situations, bargaining *ex ante* is infeasible and parties undertake such activities because they know there is some potential for bargaining *ex post*. In either case, strategic parties may have an incentive to undertake socially wasteful activities, and, anticipating such activities, potential victims may engage in wasteful precautions. In addition, parties may engage in strategic positive spillovers—opportunistically withholding social benefits—as well as strategic negative spillovers—opportunistically imposing social costs.

The legal system can possibly reduce, but almost certainly cannot eliminate, this type of opportunistic behavior. Transaction costs, reputation effects, and social norms may decrease the likelihood of strategic spillovers, even in the absence of any legal intervention. When strategic spillovers do occur, however, the legal system usually fails to address them. Moreover, given certain technological changes (like the Internet) and institutional developments (like the Clean Development

388. See *supra* Part I.A.

389. See *supra* Part V.A.

Mechanism) that reduce the transaction costs of extracting payments, strategic spillovers may pose an even greater problem going forward.

Attempting to address strategic spillovers through the traditional mechanisms for resolving externalities can result in suboptimal outcomes. Bargaining and subsidies encourage the very activities—negotiating for payments and lobbying for subsidies—that opportunistic parties hope to undertake. Regulation may prevent certain strategic spillovers but it also might eliminate externality-generating activities that are socially desirable. In certain situations, liability rules or corrective taxes may be able to deter strategic spillovers while still permitting socially desirable activities, at least if litigation or administrative costs are relatively low and courts and agencies can overcome informational problems to set liability equal to damages or a tax equal to expected harm. In other situations, alternative approaches such as disclosure, inalienability, equity, and abuse of right may be useful to avoid both insufficiently deterring strategic behavior and excessively deterring nonopportunistic behavior.

Overall, this Article suggests policymakers, courts, and academics should be more cognizant of strategic spillovers and, when feasible, begin to address this type of opportunism through externalities. In any event, future analyses of social costs should not assume that the harm arising as a byproduct of an activity is necessarily unintended.